

Mission Statement

The Nebraska Coalition to Eliminate Lead Poisoning will cooperatively and collaboratively work to actively attain the elimination of lead poisoning in Nebraska by 2010.





TABLE OF CONTENTS

I.	ACRONYMS	4
II.	NTRODUCTION	5
III.		5 7
IV.	NEBRASKA HOUSING STOCK	8
v.		1
VI.	1. IMPROVE HOUSING IN NEBRASKA	15 15 16 16 16 17 18 18 19 19 10
	3.1 NEBRASKA MEDICAID PROGRAM	21 25

4.	OMAHA COMMUNITY ADVISORY GROUP ELIMINATION PLAN	26
	1.0 Introduction	28
	2.0 Comprehensive	30
	3.0 Community Awareness and Education	
	3.1 Public Outreach and Community Awareness	
	3.2 Education and Training	34
	4.0 Human Health	36
	4.1 Screening for Elevated Blood Lead Levels	36
	4.2 Monitoring and Case Management	
	4.3 Surveillance	37
	5.0 Lead Safe Environments	38
	5.1 Source Identification	38
	5.1.1 Soil	38
	5.1.2 Residences	39
	5.1.3 Water and Other Possible Sources	39
	5.2 Source Remediation	39
	5.2.1 Soil	40
	5.2.2 Lead-Based Paint	42
	5.2.3 Dust	42
	5.2.4 Water, Air and Other Sources	43
	5.3 Surveillance	43
	6.0 Coordination and Collaboration	 4 4
	6.1 Alliance Role and Responsibilities	 4 4
	6.2 Current service Providers	44
	6.3 Expanded and Improved Services	46
	6.4 Research	46
	6.5 Funding	46
	6.6 Evaluation	46
5.	DOUGLAS COUNTY HEALTH DEPARTMENT WORK PLAN	47
6.	ELIMINATION PLAN EVALUATION	64
7.	ACKNOWLEDGMENTS	64

ACRONYMS

1. BLL Blood Lead Levels
2. CAG Community Advisory Group
3. CDC Centers for Disease Control and Prevention
4. CHW Community Health Worker
5 CLPPP Childhood Lead Poisoning Prevention Program
6 DCHD Douglas County Health Department
7. EBL Elevated Blood Lead Level
8. EPA Environmental Protection Agency
9. LPC Lead Program Coordinator
10. PSA Public Service Announcement
11. STELLAR Systematic Tracking of Elevated Leads Levels and Remediation database
12. ug/dl Micrograms lead per deciliter blood

INTRODUCTION

The Centers for Disease Control and Prevention (CDC) has set a goal to eliminate childhood lead poisoning b 2010. Based on guidance from the CDC, elevated blood lead (EBL) level is defined as a level greater than or equal to 10 micrograms of lead per deciliter of blood ($\mu g/dL$). Nationally there are approximately 434.000 children in the United States between the ages of 1 and 5 who have blood lead levels greater than 10 $\mu g/dL$.

The CDC provides technical and financial assistance to state and local childhood lead poisoning prevention programs. As part of the assistance CDC has required that grantees develop a strategic plan to eliminate childhood lead poisoning by 2010. To achieve this task and eliminate childhood lead poisoning by the year 2010, the Nebraska Coalition to Eliminate Childhood Lead Poisoning was formed and developed this Nebraska Childhood Lead Poisoning Elimination Plan.

LEAD AS A HEALTH RISK IN NEBRASKA

Childhood lead poisoning is the leading preventable environmental health disease in Nebraska. Lead is a biochemical poison effecting a number of organ systems, including the central nervous system of a developing child. Elevated blood levels are associated with learning deficits, behavior problems, and growth delays in young children. Young children are more sensitive to the effects from lead exposure than adults. Ingestion of lead occurs primarily among young children through the exposure of lead contaminated household dust. This dust is found primarily in homes built prior to 1978 with deteriorated lead-based paint or other lead hazards. While medical treatment, known as chemical chelation, is available and used to reduce high blood lead levels, prevention is the desired intervention due to the irreversible developmental damages lead imposes upon a child. Detection early in a child's life can focus preventative measures that can be implemented and reduce the risk of additional exposures for the child and other siblings.

All children under the age of 6 years are at risk. However, children from the time they begin to crawl until the time their "hand-to-mouth" activity declines are at greatest risk of lead ingestion. Reviewing State of Nebraska data for the year 2003 it shows that 18,913 children were reported screened (Table 1). Within that same group of children, 315 were indicated to have EBL The number of children screened is just slightly lower than the 18,931 screens performed in 2002, however during 2002 there were 403 children with lead screens greater than $10 \,\mu\text{g/dL}$ of blood. This is a 22% decrease of 88 poisoned children in Nebraska. The area of greatest concern in Nebraska is Douglas County.

Omaha, Nebraska in Douglas County is currently a US Environmental Protection Agency Superfund site for the cleanup of lead contaminated soil. The site includes surface soils at residential properties, child care facilities, schools, and other residential-type properties in the city of Omaha, Douglas County, Nebraska that have been contaminated as a result of air emissions from lead smelting operations. The total area of the Omaha Lead site is approximately 8,840 acres. The site was proposed to the National

Priorities List of sites for cleanup because of the presence of lead contamination in soil at residential properties, childcare facilities, schools, and other residential-type properties.

During 2003, 77% of the children who had elevated blood lead levels in Nebraska resided in Douglas County. As part of the Coalition, the Douglas County Health Department has worked collaboratively with the Omaha Community Advisory Group on Lead to develop a local elimination plan. The local elimination plan is a subpart of this statewide elimination plan. The Douglas County Health Department Lead Program, located in Omaha, Nebraska, offers primary and secondary prevention services to the largest concentrated population base in the state. According to the 2000 Census, there are over 47,000 children under the age of 7 years in the county. Over 20,000 of these children live in 11 ZIP codes where almost 60% of the housing units were built before 1950. Over 80% of the total minority population in Douglas County lives in these 11 ZIP codes. A large segment of this area is also under consideration for listing on the National Priorities List as a "Superfund" site due to elevated soil lead levels possibly linked to prior industrial exposure.

In 2003, only 6,530 children in the 11 ZIP codes received a blood lead test (30%) with 303 of them testing at or above 10 ug/dL (4.8% of those tested). The screening rates for the entire county averaged 20% in 2003, with 9,598 children receiving testing and 339 children testing at or above 10 ug/dL (3.5 % of those tested). Historically, only 45% of 463 children with lead levels \geq 15 ug/dL between 1996 and 2001 were diagnosed or experienced their highest levels by 24 months of age. Minority children represented over 67% of these children, while minorities represent less than 20% of the total county population.

Table 1. Nebraska Confirmed Childhood Lead Screening 2002-2003 2002

Provider	Total Screens	>10 ug/dl	%>10	>15 ug/dl	%>15
Douglas Co HD	9521	307	3.2%	130	1.4%
Lincoln/Lancaster Co HD	1208	9	0.7%	5	0.4%
Nebraska CLPPP	8202	87	1.1%	58	0.7%
Totals	18931	403	2.1%	193	1.0%

2003

Provider	Total Screens	>10 ug/dl	% >10	>15 ug/dl	%>15
Douglas Co HD	9598	241	2.5%	98	1.0%
Lincoln/Lancaster	1059	9	0.8%	5	0.5%
Co HD					
Nebraska CLPPP	8260	65	0.8%	45	0.5%
Totals	18917	315	1.7%	148	0.8%

Source: Nebraska HHS, R&L Childhood Lead Poisoning Prevention Program, 2004

Below is a table of screening results reported to HHSS Disease Surveillance Section during the years of 1997 through 2003.

Table 2. Nebraska Childhood Lead Screens

Year	Number Elevated	Number Reported
2003	315	18,917
2002	403	18,931
2001	540	13,984
2000	518	13,294
1999	582	10,944
1998	612	8,391
1997	759	6,324

Source: Nebraska HHS, R&L Childhood Lead Poisoning Prevention Program, 2004

Table 2 shows the number of children screened is increasing and the number of children with elevated blood lead levels is decreasing. This success in reducing the number of children with elevated blood lead levels demonstrates that we must better identify the children most likely to have elevated blood lead levels in Nebraska and focus our screening resources on these individuals. Our screening rates in association with housing and population data can also identify those areas of the State by county where more public outreach needs to be performed.

Risk Factors

Research concerning risk factors for having EBL has been conducted by the CDC during the National Health and Nutrition Examination Surveys (NHANES) 1991 to 1994. The following is an excerpt from the February 1997 MMWR report by the CDC on the prevalence of elevated blood lead level in the United States population.

For children aged 1–5 years, the prevalence of BLLs >10 mg/dL was higher among those who were non-Hispanic blacks or Mexican Americans, from lower-income families, living in metropolitan areas with a population >1 million, or living in older housing (Table 2). The differences in risk for an elevated BLL by race/ethnicity, income, and urban status generally persisted across age-of-housing categories. Similarly, the higher risk for an elevated BLL associated with older age of housing generally persisted across race/ethnicity, income, and urban status categories. Therefore, the risk for an elevated BLL was higher among non-Hispanic black children living in housing built before 1946 (21.9%) or built during 1946–1973 (13.7%), among children in low-income households who lived in housing built before 1946 (16.4%), and among children in areas with

populations >1 million who live in housing built before 1946 (11.5%) when compared with children in other categories. Based on a multivariate logistic regression model, non-Hispanic black race/ethnicity, low income, and living in housing built before 1946 were independent predictors of elevated BLLs in children aged 1–5 years. Living in urban areas was not an independent predictor of elevated BLLs when controlling for race/ethnicity, income, and age of housing.

This research suggests that the prevailing risk factors for elevated blood lead levels are Race/Ethnicity, Poverty, and Age of Housing. The Coalition will continue to use these risk factors to identify geographic areas in Nebraska likely to have children in risk of developing elevated blood lead levels (EBL) and prevent lead poisoning. Currently the Nebraska Childhood Lead Poisoning Prevention Program is compiling an epidemiology report to determine any racial or ethnic trends of lead poisoned children.

A risk questionnaire has been developed and is being used when a child gets screened. During a child health check, the health care provider goes through the questionnaire with the parent or guardian and determines the lead risk factors and environmental hazards. Unfortunately, not all health care providers utilize the questionnaire. The NCELP will work to distribute the questionnaire to all primary care providers in the State of Nebraska, health educators, schools, and child day care providers.

NEBRASKA HOUSING STOCK

According to the 2000 Census data, there are 37,102 children 5 years and younger living in housing built prior to 1950. There are 449,306 owner-occupied homes and 216,878 renter-occupied homes in Nebraska. A breakdown of number of homes by county is shown in Table 3 and Table 4 shows the age of housing in Nebraska. Seventy-six percent (76%) of Nebraska housing is built prior to 1978 and 32% is built prior to 1950.

Table 3. Housing Totals per County

	Table 3. Housing Totals per County							
	County	Housing units: Total		County	Housing units: Total		County	Housing units: Total
1	Douglas	192672	34	Dawes	4004	67	Nance	1787
2	Lancaster	104217	35	Jefferson	3942	68	Franklin	1746
3	Sarpy	44981	36	Butler	3901	69	Hitchcock	1675
4	Hall	21574	37	Hamilton	3850	70	Pawnee	1587
5	Buffalo	16830	38	Burt	3723	71	Frontier	1543
6	Scotts Bluff	16119	39	Wayne	3662	72	Perkins	1444
7	Dodge	15468	40	Merrick	3649	73	Boyd	1406
8	Lincoln	15438	41	Nemaha	3439	74	Garden	1298
9	Madison	14432	42	Antelope	3346	75	Gosper	1281
10	Adams	13014	43	Pierce	3247	76	Greeley	1199
11	Platte	12916	44	Cherry	3220	77	Dundy	1196
12	Cass	10179	45	Clay	3066	78	Deuel	1032
13	Gage	10030	46	Sheridan	3013	79	Garfield	1021
14	Dawson	9805	47	Fillmore	2990	80	Rock	935
15	Saunders	8266	48	Kearney	2846	81	Sioux	780
16	Dakota	7528	49	Thayer	2828	82	Wheeler	561
17	Washington	7408	50	Howard	2782	83	Keya Paha	548
18	Otoe	6567	51	Boone	2733	84	Hayes	526
19	Seward	6428	52	Furnas	2730	85	Grant	449
20	York	6172	53	Polk	2717	86	Thomas	446
21	Saline	5611	54	Dixon	2673	87	Hooker	440
22	Custer	5585	55	Nuckolls	2530	88	Logan	386
23	Box Butte	5488	56	Thurston	2467	89	Loup	377
24	Holt	5281	57	Morrill	2460	90	Banner	375
25	Red Willow	5278	58	Stanton	2452	91	Blaine	333
26	Keith	5178	59	Harlan	2327	92	McPherson	283
27	Knox	4773	60	Valley	2273	93	Arthur	273
28	Cheyenne	4569	61	Johnson	2116			
29	Richardson	4560	62	Kimball	1972			
30	Cuming	4283	63	Webster	1972			
31	Cedar	4200	64	Chase	1927			
32	Phelps	4191	65	Brown	1916			
33	Colfax	4088	66	Sherman	1839			

Source: U.S. Census Bureau, Census 2000

Table 4. Nebraska Housing (Year Built)

NOTE: Data based on a sample except in P3, P4, H3, and H4. For information on confidentiality protection, sampling error, nonsampling error, and definitions see http://factfinder.census.gov/home/en/datanotes/expsf3.htm.

Subject	Number	Percent
TENURE BY YEAR STRUCTURE BUILT	Transcr	rereene
THROKE BY THAK BIROCTOKE BOTH		
Owner-occupied housing units		
Built 1999 to March 2000	7,909	1.8
Built 1995 to 1998	26,880	6.0
Built 1990 to 1994	25,634	5.7
Built 1980 to 1989	46,516	10.4
Sub Total (>1979)	106,939	23.8
Built 1970 to 1979	82,582	18.3
Built 1960 to 1969	59,670	13.3
Built 1950 to 1959	52,952	11.7
Built 1940 to 1949	28,674	6.4
Built 1939 or earlier	118,489	26.4
Sub Total (<1950)	147,163	32.8
	117/103	32.0
Sub Total (<1979)	342,367	76.2
Median Year Built	1964	(X)
TOTAL	449,306	100.0
Renter-occupied housing units		
Built 1999 to March 2000	3,677	1.7
Built 1995 to 1998	14,967	6.9
Built 1990 to 1994	11,222	5.2
Built 1980 to 1989	23,761	11.0
Sub Total (>1979)	53,627	24.7
	33,721	
Built 1970 to 1979	44,818	20.7
Built 1960 to 1969	30,166	13.9
Built 1950 to 1959	25,219	11.6
Built 1940 to 1949	17,495	8.1
Built 1939 or earlier	45,553	21.0
Sub Total (<1950)	63,048	29.1
Sub Total (<1979)	163,251	75.3
Median Year Built	1967	(X)
		(22)
TOTAL	216,878	100.0

(X) Not applicable.

Source: U.S. Census Bureau, Census 2000 Summary File 3, Matrices H36, H37, H38, and H39.

NEBRASKA COALITION TO ELIMINATE LEAD POISONING

The Nebraska Childhood Lead Poisoning Elimination Plan consists of a multiorganization task force to address lead poisoning in three areas of attack. The three areas are the Nebraska housing, education and outreach for people living in Nebraska and the screening of children for lead poisoning. The coalition will extend lead poisoning prevention information to each household in Nebraska through multi-media advertisements, local presentations, and direct contact with citizens.

The coalition began meeting on July 30, 2003 and continues to meet on a quarterly basis. Members from various health departments, economic development districts, community action and education organizations contribute to the development of the elimination plan and the on-going pursuit of the elimination of lead poisoning. The Nebraska Coalition consists of input and resources from the following organizations:

- Blue Valley Community Action Agency, INC.
- Central Nebraska Community Services
- Central District Health Department
- Clay County Health Department
- Dakota County Health Department
- Dodge County Health Department
- Douglas County Health Department
- East Central District Health Department
- Four Corners Health Department
- Goldenrod Hills Community Services
- Lincoln/Lancaster County Health Department
- Mid-Nebraska Community Action
- Nebraska Department of Economic Development
- Nebraska Lead Poisoning Prevention Program
- Nebraska Lead Hazard Control Program
- Nebraska Medicaid/KIDS Connection Programs
- Nebraska Public Health Laboratory
- Northeast Nebraska Development District
- Northeast Nebraska Public Health Department
- Omaha Community Advisory Group
- Panhandle Community Services
- Red Willow County Health Department
- Southeast District Health Department
- Southeast Nebraska Development District
- Southwest Nebraska Public Health Department
- Three Rivers Public Health District
- University of Nebraska Cooperative Extension Offices
- University of Nebraska Medical Center

Mission Statement

The Nebraska Coalition to Eliminate Lead Poisoning will cooperatively and collaboratively work to actively attain the elimination of lead poisoning in Nebraska by 2010.

ELIMINATION GOALS AND STRATEGIES

The Nebraska Coalition to Eliminate Lead Poisoning will target at-risk population by using Medicaid data, the 2000 Census age of housing and population data and the childhood and adult lead test results in Nebraska. Considering this, targeting areas of the State possessing risk factors as outlined above is the best means of eliminating childhood lead poisoning in Nebraska.

GOAL 1. IMPROVE HOUSING IN NEBRASKA AND IDENTIFY LEAD HAZARDOUS HOMES.

NEBRASKA HOUSING

Families Living In Pre-1979 Housing

Objective 1. The Nebraska Coalition to Eliminate Lead Poisoning will target Pre-1978 housing to ensure proper lead poisoning prevention education and outreach for families.

According to the US 2000 Census, there are 91,732 children 5 years old and younger living in housing dated pre-1979. Data was not available to cut off at pre-1978 or to include children 6 years of age. The Nebraska Coalition to Eliminate Childhood Lead Poisoning will work to update the data as new numbers are available. Table 5 shows the distribution of children living in pre-1979 housing in Nebraska.

Evaluation: A report will be compiled of housing by county of addresses of pre-1978

housing.

Time Line: July 2006

Table 5	Nehracka	Housing	/ Population Data
I able 5.	TICULASNA	HUUSHIE	/ I Upulalivii Dala

Age	Year Structure Built	Count
Under 3 years	1970 to 1979	12,136
	1960 to 1969	7,857
	1950 to 1959	7,345
	1940 to 1949	4,004
	1939 or earlier	13,647
	Sub Total	44,989
3 and 4 years	1970 to 1979	7,984
	1960 to 1969	5,367
	1950 to 1959	4,504
	1940 to 1949	3,016
	1939 or earlier	9,755
	Sub Total	30,626
5 years	1970 to 1979	4,329
	1960 to 1969	2,637
	1950 to 1959	2,471
	1940 to 1949	1,530
	1939 or earlier	5,150
	Sub Total	16,117
		91,732
	Under 3 years 3 and 4 years	Under 3 years 1970 to 1979 1960 to 1969 1950 to 1959 1940 to 1949 1939 or earlier Sub Total 3 and 4 years 1970 to 1979 1960 to 1969 1950 to 1949 1939 or earlier Sub Total 5 years 1970 to 1979 1960 to 1969 1950 to 1969 1950 to 1959 1940 to 1949 1939 or earlier

Source: US. Census Bureau, 2000

Lead Hazard Control Funding

Objective 2. The NCELP will continue to coordinate Lead Hazard Control funding to low-income families with children.

The Nebraska Lead Hazard Control Program received a 2002 HUD grant for \$2,000,000 to complete lead hazard control work on 150 homes in Nebraska. Property owners and renters may apply to the LHC Program for assistance in eliminating and reducing lead hazards in their home. Acceptance into the LHC program is contingent upon children under 7 years of age living in the house (or visiting on a routine basis), a household income less than 80% of the county's median household income and identifiable lead hazards in the home.

The Nebraska LHC Program Director is also the Nebraska CLPPP coordinator. This dual role allows direct information exchange between programs. In addition to this the Nebraska CLPPP EBL case manager is also the Nebraska LHC investigator. All parents/guardians of children with elevated blood lead levels are provided information and application materials for the Nebraska LHC Program. Parents/guardians are strongly encouraged to enroll in the LHC program and provide a lead safe home for the children.

Enrollment into the LHC program is voluntary, however the health and safety of the child may require the Nebraska CLPPP to refer the case to the Nebraska Child Protection Services.

Evaluation: Quarterly reports to HUD.

Time Frame: Ongoing

CDBG and HOME Funding and other funding sources

Objective 3. The NCELP will work to expand the education and outreach of CDBG and HOME funding opportunities to low-income families with lead hazards in their homes.

The Nebraska Department of Economic Development administers the HUD sponsored Community Development Block Grant (CDBG) and the HOME loan programs. These funding sources target low-income housing and provide grant and low interest loan money for property owners to pay for housing improvements.

The NCELP will market the CDBG and HOME programs to families across Nebraska via the local health departments, local economic development districts, local housing authorities and neighborhood associations.

The NCELP will also investigate other funding opportunities that may improve the housing in Nebraska.

Evaluation: Report of CDBG and HOME projects completed annually in Nebraska.

Time Frame: Annual report beginning July 2005.

Local Housing Authorities

Objective 4. The NCELP will work with the local housing authorities to establish lead safe work place requirements on all homes built prior to 1978 and enforce the EPA 1018 Disclosure rule for all landlords of properties built prior to 1978.

Local housing authorities will be a key component in eliminating childhood lead poisoning. The NCELP will meet with the highest populated counties beginning in January 2005.

Evaluation: Report of number of county boards visited and reports of enforcement.

Time Frame: July 2007

County Assessors

Objective 5. The NCELP will collaboratively work with the Nebraska County Assessors to identify all housing stock in Nebraska built prior to 1978.

The Nebraska County Assessor offices maintain housing data on homes in Nebraska. The NCELP will meet with local County Assessors to access housing data and compile that data into the Nebraska Lead Safe Housing Database.

Evaluation: Completion of database.

Time Frame: July 2006

County Commissioners

Objective 6. The NCELP will meet with the Nebraska County Commissioners to educate and all 93 counties about the need for local building codes for renovating homes built prior to 1978.

The NCELP will meet with county commissioners to educate them on the need for local building codes. The counties with the greatest number of housing will be contacted first until all 93 are educated.

Evaluation: Report on counties visited and new building codes established.

Time Frame: July 2008.

Nebraska State Laws

Objective 7. The NCELP will work to draft legislation to address lead-based paint in housing.

The NCELP will draft legislation to require lead-based paint inspections during the sale of all homes built prior to 1978.

Evaluation: Completion of drafted legislation

Time Frame: July 2005.

Nebraska Lead-Safe Housing Database

Objective 8. The NCELP will work to develop a Lead-Safe Housing Database.

In conjunction with the LHC Program the CDBG and HOME funding opportunities and local housing authorities, county commissioners and county assessors' offices, the Nebraska Coalition to Eliminate Childhood Lead Poisoning will work to establish a Lead-Safe Housing Database. This database will be maintained by the Nebraska LHC Program and will be continually updated via collaborative data collection. The database should be maintained on the LHC web-site and will be sent electronically to Nebraska licensed real-estate companies, brokers and agents.

Data will be collected from all county assessors on housing stock in Nebraska and addresses of all housing built prior to 1950 will be cataloged as high risk and housing built after 1950 but prior to 1978 will be cataloged as medium risk.

Evaluation: Completion of database.

Time Frame: July 2006

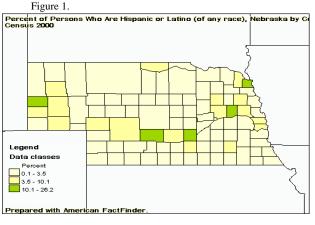
EDUCATION AND OUTREACH

PUBLIC EDUCATION

Nebraska Health and Human Services System

Objective 9. The NCELP will work to identify those minority populations who have lead hazards and provide education and outreach to those families.

The Nebraska Office of Minority Health routinely provides assistance to the underserved minority population. This Office can provide an additional avenue for increased education and outreach for lead poisoning prevention. The annual Nebraska Minority Health Conference is an opportunity for the NCELP to address childhood lead poisoning and increase the public awareness of the problem. According to the 2000 Census (Figure 1) Nebraska's Hispanic and Latino populations have higher concentrations in the counties of Dakota, Platte, Hall, Dawson, and Scotts Bluff.



Evaluation: Report of education and outreach specifically targeting the minority

populations.

Time Frame: July 2006

University of Nebraska Cooperative Extension

Objective 10. The NCELP will work collaboratively with the University of Nebraska Cooperative Extension offices in each county to identify lead hazards and provide education and outreach to all residents in Nebraska.

The University of Nebraska Cooperative Extension system is a statewide education provider for Nebraska. The UNCE provides each county in Nebraska a direct link to the University and resources for rural and urban Nebraska. The County Cooperative Extension agents are experts at providing accurate information on nutrition, lead poisoning, and housing for Nebraskans.

Evaluation: An annual report of education and outreach events will be prepared.

Time Frame: July 2005 - Ongoing

Nebraska Community Based Organizations

Objective 11. The NCELP will work collaboratively with all Community Based Organizations to increase public awareness and provide assistance to identify lead hazards in Nebraska.

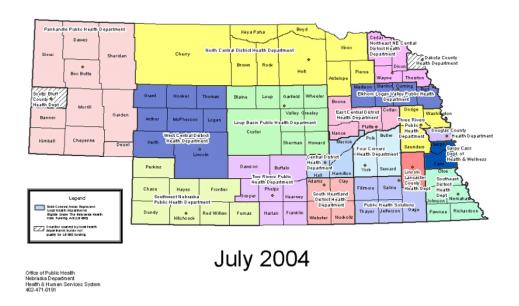
The Nebraska Childhood Lead Poisoning Prevention Program partners with Community Action Partnerships across the state to provide blood lead screening to children under seven years of age. The NCELP would like to enhance that outreach to include faith-based organizations and other community organizations to increase education and awareness.

Evaluation: An annual report of education and outreach events will be prepared.

Time Frame: July 2005 - Ongoing

Nebraska Local Health Departments

Nebraska Local Health Departments



Objective 12. The NCELP will work collaboratively with all local health departments to increase public awareness and provide assistance to identify lead hazards in Nebraska.

Nebraska has 25 local health departments across the state. These local health departments are members of the NCECLP and work directly with the Nebraska Childhood Lead Poisoning Prevention Program. Coordinate education and outreach events for public officials hosted by each County Health Department District (25) over the next five years.

Evaluation: An annual report of education and outreach events will be prepared.

Time Frame: July 2005 - Ongoing

Nebraska Childhood Training Center

Objective 13. The NCELP will work collaboratively with the Nebraska Childhood Training Center to provide lead-trained educators for Nebraska professionals who work with children.

The Nebraska Childhood Training Center provides education and training for professionals (daycare providers, teachers, etc.) who work with children. This network allows the NCELP a direct educational outlet to private professionals in Nebraska.

Evaluation: A report on the number of trainings provided and those attending the training.

Time Frame: July 2007.

Medical Schools

Objective 14. The NCELP will work to enhance the education of newly trained physicians to include lead poisoning prevention.

There are two medical universities in Nebraska, Creighton University and the University of Nebraska Medical College (UNMC). The NCELP will work with faculty of Creighton University and UNMC to encourage the inclusion of lead poisoning prevention and child screening requirements training of new physicians.

Evaluation: A report on the status of lead training in medical schools.

Time Frame: July 2007

Nebraska Lead-based Paint Supervisor and Worker Certification

Objective 15. The NCELP will work with the Nebraska Lead-based Paint Program to encourage contractors to become certified Lead-based Paint Supervisors and Workers.

The Nebraska Lead-based Paint Program enforces the Nebraska State laws requiring certified workers and supervisors when lead hazard abatement is performed. Currently there are only a few contractors outside of the City of Omaha. The NCELP will promote the program by providing incentives for contractors who become certified.

Evaluation: A report on the number of certified workers and supervisors in the state.

Time Frame: July 2007

Lead Safe Work Practices

Objective 16. The NCELP will increase the number of contractors trained in Lead Safe Work Practices (LSWP) to eliminate lead poisoning resulting from home renovations and remodeling.

Currently there are 1080 Nebraska contractors trained in LSWP. The NCELP considers this training an integral part of the elimination of childhood lead poisoning. Although the LSWP course is not regulated by the Nebraska Lead-Based Paint Program, it is an awareness course that enables home owners and small contractors to work with lead hazards and prevent lead contamination during small home repairs and remodeling.

LSWP trained contractors may work on CDBG and HOME improvement projects for the Nebraska Department of Economic Development, however they cannot remove lead for the Nebraska Lead Hazard Control projects. LSWP trained contractors are allowed to do finish work and install new components after lead abatement has been completed by Nebraska certified workers and supervisors.

Evaluation: A report on the number of LSWP contractors in the state.

Time Frame: July 2007

Landlord / Tenants

Objective 17. The NCELP will provide education seminars for landlords and tenants in Nebraska.

The NCELP will work collaboratively with local housing authorities to host education and outreach seminars on the requirements of the EPA 1018 Disclosure Rule and potential consequences of not providing the information. These seminars will also provide an addition venue for the promotion of the Nebraska Lead Safe Housing Database.

Evaluation: A report on the education and outreach provided in the state.

Time Frame: July 2006

Real Estate Businesses

Objective 18. The NCELP will contact all licensed real estate businesses in Nebraska and provide education on lead hazards and potential impact from lead poisoning.

Nebraska real estate licenses are issued by the Nebraska Real Estate Commission. The Commission provides continuing education courses for renewal of those licenses. The NCELP will work collaboratively with the Nebraska Real Estate Commission to improve the education of buyers and sellers during real estate transactions.

Evaluation: A report on the education provided by the NCELP.

Time Frame: July 2006

GOAL 3. INCREASE CHILDHOOD BLOOD LEAD SCREENINGS

Although not a primary prevention tool, the screening of children at risk for lead poisoning remains a primary concern for the NCELP. Children at risk for lead poisoning need to be properly screened to prevent permanent physical damage. Through the combined efforts of the Nebraska Medicaid Program, the Community Action Partnerships, the County Health Departments, and the Nebraska Childhood Lead Poisoning Prevention Program the NCELP will work to improve the screening rates in Nebraska.

Nebraska Medicaid Program

Objective 19. The Nebraska CLPPP and the Medicaid Program will meet collaborate monthly to review the data sets and eliminate childhood lead poisoning data discrepancies.

The Nebraska Medicaid Program and the Nebraska CLPPP have joined forces in the elimination of childhood lead poisoning. Collaborative and cooperative data sharing had not occurred in the past and is now available. Currently the Nebraska Medicaid Program contracts with local health department nurses to provide case management to all children in the Medicaid program. This additional human resource increases the local level of outreach and education and the number of advocates for lead safe living in rural Nebraska.

The Nebraska Attorney General's Office will investigate any fraudulent claims made by Medicaid providers who bill for EPSDT child checks and do not perform a required blood lead screen on the child.

Evaluation: An epdimiolgy report will be produced the Medicaid program and the

CLPPP.

Time Frame: February 2005

Objective 20. The NCELP will cooperatively provide education and outreach to Medicaid Providers on the necessity to perform lead screens and increase screening rates among Medicaid Providers.

Currently there are approximately 46% of children 5 years and younger who are enrolled in the Nebraska Medicaid Program. In accordance with the Nebraska Medicaid Program regulations Title 471 NAC 33-002.02D, 4., children enrolled in the Medicaid Program are to receive a blood lead screen as part of the EPSDT child checks at 12 months and, if possible 24 months. Below is the excerpt from the state regulations given to Medicaid providers regarding childhood lead screenings:

- 4. Lead toxicity screening: An assessment of risk of high-dose lead exposure and blood lead testing by either capillary or venipuncture collection method. All children ages 6-72 months of age are considered at risk for lead poisoning and must be assessed at the screening exam. Beginning at six months of age and at each visit thereafter the screening provider shall assess the child's risk for exposure. The risk assessment questions to be asked are:
- (a) Does your child live in or regularly visit a house built before 1978? Does the house have peeling or chipping paint?
- (b) Does your children live in a house built before 1978 with recent, ongoing, or planned renovation or remodeling:
- (c) Have any of your children or their playmates had lead poisoning;
- (d) Does your child frequently come in contact with an adult who works with lead (e.g. construction, welding, pottery)
- (e) Does your child live near a lead smelter, battery-recycling plant, or other industry likely to release lead?
- (f) Do you use any home or folk remedies that may contain lead?
- (g) Does your child live near a heavily traveled major highway where soil and dust may be contaminated with lead?
- (h) Does your home's plumbing have lead pipes or copper with lead solder joints?
- (j) Has your child had a blood lead test in the last 12 months?

If the answers to all questions are negative, a child is considered at low risk for high doses of lead exposure but is to receive a blood lead test at 12 months and, if possible, at 24 months.

If the answer to any of the questions is positive, a child is considered at high risk and a blood lead test must be obtained immediately and at subsequent screening examinations. Physicians are to reference CDC guidelines for patient management and treatment.

Table 6 shows the Nebraska Medicaid data of enrollments by county in FY 2004. The NCELP will utilize this data to target those counties that have the most children on Medicaid for education and outreach of the parents/guardians and health care providers.

Table 6.
Eligibility Compared to Census by County
Jul-Jul 2004 (Covered Date)

County	Eligibles (0-5)	Estimate Age 6, based on age 5	Estimate Age 0-6	County 0-6 Population	% of Population in Medicaid
Adams	967	136	1,103	2,252	48.98%
Antelope	189	31	220	640	34.38%
Arthur	103	0	10	30	33.33%
Banner	8		9	65	13.85%
Blaine	12	<u>'</u> 1	13	39	33.33%
Boone	95	16	111	562	19.75%
Box Butte	448		524	1,181	44.37%
Boyd	52	10	62	182	34.07%
Brown	93	14	107	250	42.80%
Buffalo	1,245	172	1,417	3,235	43.80%
Burt	157	22	179	574	31.18%
Butler	177	28	205	655	31.30%
Cass	561	79	640	2,156	29.68%
Cedar	159	29	188	857	21.94%
Chase	95	14	109	351	31.05%
Cherry	239	40	279	541	51.57%
Cheyenne	255	46	301	786	38.30%
Clay	147	20	167	515	32.43%
Colfax	425	44	469	843	55.63%
Cuming	210	22	232	791	29.33%
Custer	342	51	393	880	44.66%
Dakota	1,024	139	1,163	1,920	60.57%
Dawes	303	44	347	620	55.97%
Dawson	1,193	149	1,342	1,890	71.01%
Deuel	33	4	37	150	24.67%
Dixon	136	21	157	527	29.79%
Dodge	1,103	137	1,240	2,636	47.04%

County	Eligibles (0-5)	Estimate Age 6, based on age 5	Estimate Age 0-6	County Population	% of Population in Medicaid
Douglas	17,013	2,271	19,284	38,357	50.28%
Dundy	56	8	64	133	48.12%
Fillmore	130	14	144	505	28.51%
Franklin	63	11	74	260	28.46%
Frontier	43	6	49	245	20.00%
Furnas	126	22	148	330	44.85%
Gage	531	86	617	1,666	37.03%
Garden	43	5	48	143	33.57%
Garfield	57	6	63	137	45.99%
Gosper	34	6	40	136	29.41%
Grant	11	0	11	69	15.94%
Greeley	65	9	74	212	34.91%
Hall	2,749	358	3,107	4,472	69.48%
Hayes	6	1	7	76	9.21%
Hitchcock	107	14	121	242	50.00%
Holt	288	43	331	1,049	31.55%
Hooker	14	2	16	44	36.36%
Howard	156	30	186	511	36.40%
Jefferson	183	32	215	601	35.77%
Johnson	105	13	118	329	35.87%
Kearney	154	24	178	569	31.28%
Keith	192	31	223	698	31.95%
Keya Paha	16	1	17	57	29.82%
Kimball	124	22	146	312	46.79%
Knox	274	46	320	640	50.00%
Lancaster	7,169	934	8,103	18,566	43.64%
Lincoln	1,093	144	1,237	2,812	43.99%
Logan	16	3	19	82	23.17%
Loup	8	2	10	48	20.83%
Madison	1,384	170	1,554	3,093	50.24%
McPherson	5	0	5	41	12.20%
Merrick	164	30	194	644	30.12%
Morrill	180	38	218	457	47.70%
Nance	105	16	121	346	34.97%
Nemaha	146	23	169	548	30.84%
Nuckolls	119	19	138	331	41.69%
Otoe	313	59	372	1,117	33.30%
Pawnee	52		60	208	28.85%
Perkins	51	8	59	257	22.96%
Phelps	278	42	320	776	41.24%
Pierce	163		190	714	26.61%
Platte	926		1,052	2,947	35.70%
Polk	111	11	122	387	31.52%
Red Willow	323	41	364	873	41.70%

County	Eligibles (0-5)	Estimate Age 6, based on age 5	Estimate Age 0-6	County Population	% of Population in Medicaid
Richardson	245	37	282	724	38.95%
Rock	52	9	61	118	51.69%
Saline	341	40	381	946	40.27%
Sarpy	2,072	314	2,386	12,149	19.64%
Saunders	392	58	450	1,567	28.72%
Scotts Bluff	1,723	231	1,954	3,008	64.96%
Seward	254	43	297	1,234	24.07%
Sheridan	230	27	257	463	55.51%
Sherman	90	16	106	244	43.44%
Sioux	26	4	30	93	32.26%
Stanton	111	19	130	603	21.56%
Thurston	619	95	714	886	80.59%
Valley	115	18	133	302	44.04%
Washington	272	35	307	1,332	23.05%
Wheeler	23	2	25	93	26.88%
York	327	45	372	1,185	31.39%
Total	52,379	7,192	59,571	138,545	43.00%

Evaluation: An report will be made on the education and outreach efforts to those counties.

Time Frame: July 2005

Pediatricians And Family Practice Physicians

Objective 21. The NCELP will solicit Nebraska pediatricians and family practice physicians to encourage lead screenings among at risk children.

All members of the NCELP will provide education and outreach to physicians who routinely see patients six years old and younger. The Nebraska Medicaid Program can provide a biannual physician list of all EPSDT providers and the Nebraska Rural Health Program provides a statewide database of all physicians in Nebraska.

This information will be distributed to all members of the NCELP to provide education and outreach to those areas of the state where screening rates do not match the childhood population and Medicaid participant numbers.

Evaluation: A report will be made on the impact of education and outreach to physicians and subsequent screening rates.

Time Frame: July 2006

Nebraska Community Based Organizations and Nebraska local Health Departments/Districts

Objective 22. The NCELP will research new funding sources to provide education and outreach through the Nebraska Community Based Organizations and Nebraska local Health Departments/Districts to increase screening rates among at risk children.

The Nebraska CLPPP currently contracts with Community Based Organizations and local Health Departments/Districts to provide lead screening for those children who do not meet Medicaid eligibility. Due to funding restraints and proposed cuts in screening from CDC grant money, the NCELP will work to find new funding sources for lead screening at the Community Based Organizations and local Health Departments/Districts across the state.

Evaluation: A report on the potential funding will be made by the NCELP.

Time Frame: July 2005

OMAHA COMMUNITY ADVISORY GROUP AND DOUGLAS COUNTY ELIMINATION PLAN

All statewide goals and objectives apply to Douglas County, however as mentioned earlier, the Douglas County Health Department and the Omaha Community Advisory Group have developed a site-specific elimination plan. For the purpose of the State Elimination Plan the NCELP has included the Advisory Group plan and the Douglas County Health Department work plan.

COMPREHENSIVE PLAN FOR THE ELIMINATION OF LEAD HAZARDS IN OMAHA, NEBRASKA

Developed by Omaha Lead Site Community Advisory Group

October 2004

Purpose: Provide a comprehensive approach to address all sources of lead poisoning in the Omaha Lead Superfund Site area.

Intent: It is the intent of the Omaha Lead Site Community Advisory Group to provide this Comprehensive Plan to USEPA Region 7 for inclusion in the Omaha Lead Site Interim Record of Decision as the selected remedy.

1.0 INTRODUCTION

"Lead poisoning remains the most common and societal devastating environmental disease of young children." Public Health Service – Louis Sullivan, 1991.

"Children are more sensitive to lead. Children are much smaller than adults and by weight will receive a much higher dose given the same exposure. Differences in absorption of lead also increase the sensitivity of children. Adults absorb only 5-10% of orally ingested lead, while children absorb approximately 50% and can absorb more depending upon their nutrition. Children and pregnant women will absorb more lead because their bodies have a greater demand for calcium and iron, and the intestine responds by favoring their absorption. Lead substitutes for calcium and is thus readily absorbed, particularly if a diet is low in iron and calcium." (A Small Dose of Toxicology-Steven Gilbert) It is important to recognize that children are not little adults.

The central nervous system is the most sensitive target of lead poisoning. Fetuses and young children are especially vulnerable to the neurological effects of lead because their brains and nervous systems are still developing. A 1990 study by Herbert Needleman showed that even low levels of lead exposure would reduce the school performance of children. Numerous additional studies including those by Bellinger (1987) and Schwartz (1987) found similar results. Long term studies of infants and young children exposed to lead indicated that as they became older there was an increased likelihood that they would suffer from decreased attention span, learning disabilities, and failure to graduate from high school.

Adult nervous system effects are also apparent following lead exposure. Evidence points to damage of the peripheral nervous system which causes wrist or foot drop. Evidence also points to hypertension and memory loss in adults, infertility in men and for pregnant womenlow birth weight and miscarriages and stillbirths.

In 1991, the Centers for Disease Control and Prevention established a lead level of 10 mcg/dL as an action level when it was determined that a child had a blood lead level of that measurement or higher. Exposure to lead in dust from soil and lead-based paint has been identified as a high source of exposure for young children due to their hand to mouth behavior. In the 1990"s, the U.S. Environmental Protection Agency required that information on lead be disclosed when a home or apartment was being sold or rented. In addition, specific training is required for workers removing lead from homes or apartments. Lead-based paint remains a serious problem for many children living in older homes especially in urban areas where they can be exposed to lead dust from soil and deteriorating lead-based paint.

In response to a request from the Omaha City Council regarding concern related to the number of children residing in the eastern area of the City of Omaha who were exhibiting an elevated blood lead level as documented by the Douglas County Health Department, the U.S. Environmental Protection Agency (EPA) launched an investigation in 1997. This investigation determined lead soil contamination from industries in the eastern area of the

City of Omaha posed a health hazard to children and took action to remove this source of contamination.

The EPA determined that contaminated soil in the eastern portion of the City of Omaha contained unacceptable levels of lead, which had the potential for significant hazard to the health of young children living in the designated area. In February 2003, the Omaha Lead Site (a 20 square mile predominantly residential area) was added to the EPA Superfund National Priority List. Initial actions have included the removal and replacement of soil at the residences of homes where a child was identified with an elevated blood lead level and where properties have lead-contaminated soil at or exceeding 1200 ppm

On July 16, 2004, the US EPA, Region VII, issued a Proposed Plan – Residential Yard Soils Omaha Lead Site, which provided four alternatives to be considered as actions to address the site risks. EPA prefers Alternative 4 as an interim action to continue addressing the site risks while a phosphate treatability study is conducted. Alternative 4 involves excavation and replacement of soils from residential properties exceeding 800 ppm. EPA will continue to excavate soils exceeding 400 ppm lead at high child impact areas and homes where a child resides with an elevated blood lead level. This alternative includes a public health education program to deal with the residual risk associated with soil contamination below 400 ppm and other non-soil sources of lead.

Alternative 4 leaves open the decision to use phosphate treatment for lower levels of contamination until the treatability study has been completed. The interim approach will require EPA to propose a final remedy and seek public comment after the completion of the treatability study. This alternative also includes the additional elements of institutional controls, exterior lead-based paint remediation, and interior cleaning.

In February 2004, a Community Advisory Group was established to monitor EPA actions and provide feedback to EPA from the community. The Community Advisory Group is recommending a comprehensive plan be developed and implemented for the Omaha Lead Site. The comprehensive plan includes remediation of soil and actions relating to lead-based paint hazards and other potential sources of lead hazards. One of the goals of a comprehensive plan is to reduce lead exposure to children and pregnant/nursing women from multiple potential sources of lead, thereby reducing elevated blood lead levels within the Omaha Lead Superfund Site.

2.0 COMPREHENSIVE PLAN

The purpose of a comprehensive plan for the Omaha Lead Superfund Site is to provide a comprehensive approach to address all sources of lead poisoning in Omaha, Nebraska.

A comprehensive plan to eliminate lead poisoning for Omaha's children will include identification and remediation of all known sources of lead exposure in addition to soil contamination. While lead contamination of the soil in the designated Omaha Lead Superfund Site has been found to be an immediate hazard to children's health, it is important to recognize that children living in the Omaha Lead Superfund Site area are also exposed to the additional source of deteriorating lead-based paint and dust from both the soil and lead-based paint. Therefore, to focus solely on remediation the soil leaves a major source of lead exposure (deteriorating lead-based paint) available to children and a hazard to their health and development.

A comprehensive plan will provide for coordination of services in the Omaha Lead Site through the collaborative efforts of Omaha service providers including the Douglas County Health Department, City of Omaha Planning Department, Douglas and Sarpy County Extension Services, physicians and clinics, and community-based organizations with USEPA Region 7 Superfund activities. The participation of all these entities combined in a collaborative effort will be required for successful elimination of lead exposure. In addition, improved and expanded services provided through a coordinated collaborative effort will benefit the community of Omaha as a whole.

Present service providers have expertise in providing services in various components of a comprehensive plan and shall be enlisted to collaborate in working together to improve and expand their services in eliminating lead hazards from children's environments. Components of a comprehensive plan include:

- Outreach and awareness activities in the Omaha Lead Superfund Site area
- Education for parents, property owners, health care professionals, staff at community-based organizations
- Training for remodelers and home repair workers in lead-safe practices
- Training for contractors involved in remediation activities soil and housing
- Screening of children for elevated blood lead levels
- Case management for monitoring children with elevated blood lead levels
- Source identification soil/lead-based paint/air/water/other
- Source remediation soil/lead-based paint/lead dust
- Surveillance data collection for blood leads and housing
- Collaboration of service providers in providing coordinated services.
- Plans to expand and improve services
- Evaluation of effectiveness of collaboration and coordination efforts

The intent of developing and implementing a comprehensive plan is for the CAG to offer a preferred alternative to the USEPA Region 7 Record of Decision for the Omaha Lead Site.

Therefore, to be effective in eliminating lead hazards, the OLS Community Advisory Group is recommending the implementation of a Comprehensive Plan to Eliminate Lead Hazards for children residing in the designated Omaha Lead Superfund Site area.

3.0 Community Awareness and Education

A community awareness and education program has been developed that consists of categories, public outreach and community awareness, public education, training, and policy advocacy. The community awareness and education program will involve cooperative efforts with local government agencies, community health centers, neighborhood associations, and community-based organizations.

3.1 Public Outreach and Community Awareness

The purpose of community awareness is to raise general public awareness of potential health risks associated with lead poisoning and to inform residents on ways to minimize lead exposure to the children residing in the Omaha Lead Superfund Site area. Recognizing the diversity of cultures and languages of residents of the Omaha Lead Superfund Site area, materials and methods used for public outreach and community awareness will be linguistically and culturally appropriate. Also, the general literacy level of the area will be considered. The community awareness program will provide information on the following:

- The potential sources of lead exposure from the soil in the Omaha Lead Superfund Site area and why residents/property owners should participate in Superfund efforts to test soil in yards.
- The additional potential source of lead exposure from deteriorating lead-based paint found in older homes;
- The potential for children to be exposed to lead from dust found in the soil or lead-based paint that could have adverse health effects;
- The importance of obtaining a blood lead screening for children under seven years of age residing in the OLS area with an emphasis on children between the ages of one to three years of age;
- Primary prevention of exposure to lead dust from exterior or interior lead-based paint through home maintenance and targeted housecleaning;
- Primary prevention of exposure to lead dust through personal hygiene such as;
 washing hands after playing outdoors and washing hands and face before eating;
- Primary prevention of exposure to lead dust through providing tight groundcover in yards and elimination of bare soil next to homes and in play areas;
- Primary prevention of exposure to lead dust through proper nutrition including calcium and iron and excluding high fat foods.
- Primary prevention of exposure from other sources.
- Services available through the OLS Alliance for families/property owners in the Omaha Lead Superfund Site area. Information on these services can be provided through various approaches including door-to-door canvassing, letters to residents, etc.

Public awareness and community outreach activities will make residents conscious of the focus of the Omaha Lead Superfund activities, the risk of lead poisoning; specifically in young children and pregnant women, ways to reduce exposure to lead sources, and the

services available through the OLS Alliance. These services can be provided by the many community-based organizations located in the OLS area and through a media campaign.

The Douglas County Health Department presently provides public awareness and community outreach activities related to childhood lead poisoning prevention and have developed materials for outreach and education based on the diversity of the audiences in the metro area. To make the process smoother, one agency will take the leadership in the development; that agency should be the Douglas County Health Department. They will not be responsible for the development of all outreach and awareness and education materials, but they should provide consultation for the organizations and agencies collaborating with the Alliance so that consistent information and messages are presented by all organizations and agencies.

As part of community outreach and awareness and education, ATSDR is in the process of evaluating the current materials and curricula being utilized in the metro area. Also, as part of the process, the entities that have been identified as players in the development of public awareness and community outreach and education programs are NHHSS, DCHD, ATSDR, and the University of Nebraska Extension in Douglas and Sarpy Counties. These entities have expertise in curricula development and have an organizational mission that includes public education.

Community-based organizations presently providing public awareness and community outreach include but are not limited to the following:

- Charles Drew Community Health Center
- Chicano Awareness Center
- Greater Omaha Chamber of Commerce
- Hope Medical Outreach Coalition
- Lead Safe Omaha Coalition
- League of Women Voters of Greater Omaha
- Metropolitan Omaha Medical Society
- NAACP
- Nebraska Urban Indian Health Coalition
- Nuestro Mundo
- Omaha Housing Authority
- OneWorld Community Health Centers
- Sierra Club Missouri Valley Chapter
- Sisters Together, Inc.

Community outreach and awareness is only one step in the development of an education plan. Concerned citizens and the groups they represent in the community will and must be part of the implementation of an education plan. They are the connection between the research regarding lead poisoning and the practical application of methods to reduce the risk of lead poisoning. They are also the key to providing and addressing with the unique cultural diversity within the community. Omaha's diverse cultural population requires publishing materials in multiple languages and coordination with culturally based community groups to facilitate awareness.

3.2 Education and Training

There are differences between public education and public awareness just as there are differences between public education and education specific to target audience. Public awareness and community outreach is one step in the development of an education plan. Public education is another step in the development of an education plan and expands on information aspects of a plan.

USEPA for education grants defines "public environmental information as those activities and materials which provide facts or opinions about environmental issues or problems. Although information is an essential element of any educational effort, environmental information is not, by itself, environmental education. Environmental education increases public awareness and knowledge about environmental issues and provides the skills to make informed decisions and take responsible actions. It is based on objective and scientifically sound information. It does not advocate a particular viewpoint or course of action. It teaches individuals how to weigh various sides of an issue through critical thinking and it enhances problem-solving and decision making skills."

Public education materials and methods will be evaluated with focus groups representing the diversity of residents in the OLS site area. It is important that the information being provided gives the message intended with consideration for literacy, language and culture. Often materials are translated from English and the meaning is changed for the intended audience. Attention will be paid to the message given through graphics used along with language.

Education and/or training will be specific to targeted audiences; such as, parents, childcare providers, health care professionals and paraprofessionals, community health outreach workers, property owners, realtors, tenants, property maintenance workers, contractors and workers involved in soil remediation, contractors and workers involved in remediation of lead-based paint hazards, painters, home repair companies, and staff of community-based organizations including church members and school staff and children.

Training according to HUD curricula will be provided for all persons working in remediation of lead-based paint, soil removal, etc. It is important that persons working in lead remediation activities learn to work in a safe manner to reduce exposure of themselves and persons living on the properties. HUD approved trainers periodically provided training for supervisors and workers certified by the State, which is necessary for abatement. One day HUD approved training for property maintenance and repair and for interim control work is provided by DCHD.

Curricula relating to the OLS site will be developed for providing public education, which can be used with community-based organizations, churches, and schools. Present available curricula and materials for target audiences will be reviewed for use by the Alliance and service providers located in the OLS site. ATSDR, CDC, HUD, and EPA have developed materials and curricula, which are available for use and modification to fit the needs of the OLS site.

Delivery methods for public education or for education/training for target audiences will vary depending on the situation and the audience. Methods will include but not be limited to:

- A. Printed materials
- B. CD's with educational messages
- C. Videotapes
- D. Workshops
- E. Educational web sites
- F. One-on-one counseling
- G. Demonstration houses
- H. Demonstration landscaping
- I. Seminars
- J. Train-the-Trainer
- K. Classes at Health Centers
- L. Preschool/childcare curriculum

One of the most effective education models is through face-to-face consultations with residents. This approach will be used to educate residents to participate in the blood lead screening and monitoring program, EPA's soil sampling program, and the Alliance's environmental sampling program. Community-based organizations will be enlisted to assist in these face-to-face contacts using bilingual personnel and/or translators where needed.

An important link to providing awareness and education to the involved community is a local telephone hotline provided by the Alliance. A Lead Poisoning Prevention Hotline will be established and operated by bilingual persons with general knowledge relating to the issues for the OLS site and specific knowledge relating to lead poisoning, potential sources, effects on children and adults, how to reduce exposure, services available in the community, etc. It is important that persons answering the phone be able to answer questions and allay the fears of parents. This hotline will operate outside the normal business hours so it is available to working parents.

4.0 Human Health

4.1 Screening for Elevated Blood Lead Levels

In order to assess children's exposure to lead it is necessary to screen children with a blood lead test. Most initial screens are done with a finger stick. To confirm that the child has an elevated blood lead level it is necessary to perform a venous blood draw. The confirmatory test will rule out false positive results.

Ideally, all children under the age of seven years who reside in the OLS site area will be screened with a blood lead test annually starting at nine (9) months of age until they reach the age of seventy-two (72) months and children between the ages of thirty-six (36) months and seventy-two (72) months who have never been screened with a blood lead test will receive a blood lead test. Where the blood lead test is 10 mcg/dL or higher, the child will have a confirmatory venous blood lead test and subsequent blood lead tests will be monitored by the Douglas County Health Department.

Primary health care providers – physicians and clinics- should screen all children less than seven years of age residing in the OLS site area per the above. Primary health care providers receiving Medicaid funds are required to meet the HCFA requirements for blood lead screening. Federally funded community health centers are required to meet the HRSA requirements related to blood lead screening. Omaha has two federally qualified health centers located in the OLS site area – Charles Drew Community Health Center and OneWorld Community Health Centers.

The Federal government (HCFA and HRSA) requires Medicaid providers and health centers receiving federal grants provide lead screening services. The Federal Medicaid policy for lead screening was established by the Omnibus Budget Reconciliation Act of 1989, which required that Medicaid EPSDT services include blood lead level laboratory tests appropriate for age and risk factors. HCFA's Medicaid manual has specifically required since 1992 that, in line with CDC's recommendations, children enrolled in Medicaid be screened for elevated blood lead levels at a minimum at ages twelve (12) and twenty-four (24) months, and through seventy-two (72) months if previously unscreened. HRSA policy was established in 1992 when Public Law 102-531 amended the Public Health Service Act to include lead screening among primary services that health centers provide. HRSA policy calls for health centers to establish lead screening protocols that are consistent with CDC's guidelines, including risk assessments at well child visits and an initial blood lead test at least twelve (12) months.

Families will be educated to ask their child's primary health care provider to test their child for an elevated blood lead test. The Alliance will promote screening of children through education of local physicians and health care providers and community-based organizations. Douglas County Health Department is providing an education session for physicians and their staff on the importance of screening children especially those residing in the OLS site area for an elevated blood lead level. The Alliance will provide blood lead screening for those families where the test is not covered by insurance.

Advocacy with the Nebraska Health and Human Service System and the Metropolitan Omaha Medical Society will be implemented to ensure children are screened according to HCFA and HRSA regulations.

4.2 Monitoring and Case Management

Monitoring (surveillance) of children with an elevated blood lead level will be provided by the Douglas County Health Department (DCHD) per state regulations. Laboratories are required to report all blood lead levels to the DCHD.

Families of children with confirmed blood lead levels at or above 10 mcg/dL will receive a home visit by DCHD staff. During the home visit, parents are provided information about reducing their child's exposure through cleaning, nutrition, home maintenance, etc. Parents also receive information on the importance of follow-up tests to monitor the child's blood lead level. DCHD continues periodic visits with the families until the child's lead level is below 10 mcg/dL. In addition, DCHD has an inspector inspect the home and surroundings for lead hazards especially for lead-based paint hazards.

In addition, the community health centers and other physicians and health care providers provide medical case management for patients with an elevated blood lead level.

Families of children with blood lead levels below 10 mcg/dL will receive information about the Alliance and service provided. The Alliance will only monitor the blood lead levels of these children whose families participate in the services provided by the Alliance and provide appropriate services as needed.

4.3 Surveillance

Surveillance (monitoring) of elevated blood lead levels will continue to be is conducted by the Nebraska Health and Human Services System and the Douglas County Health Department. The surveillance system makes it possible to generate reports:

- Summary of blood lead levels for children residing in the OLS
- A comparison to children with elevated blood lead levels outside the OLS area

5.0 Lead Safe Environments

5.1 Source Identification

Identification of the source of lead hazards for residents of the OLS site area will be performed with environmental sampling. The environmental sampling will include investigating sources of potential lead exposure, including lead from soil, dust, interior and exterior paint, water and other potential sources.

"The EPA recognizes that many potential sources potentially contribute to lead exposure at the OLS. In addition to soil, other potential sources include interior and exterior lead-based paint, lead-contaminated interior dust, drinking water, occupant hobbies or activities, and occupational exposure resulting in subsequent contamination of homes. The EPA will seek to partner with other public and private entities to characterize and address all identified sources of lead exposure to the OLS community.

Consistent with agency policy, the EPA will assess the contribution of all identified sources of lead to the overall lead exposure. The EPA will participate in the development of risk reduction strategies that address all source that contribute significantly to exposure."

Proposed Plan – Residential Yard Soils Omaha Lead Site

5.1.1 Soil

The Human Health Risk Assessment developed by EPA for the OLS using site-specific information identified lead in the soil as the primary contaminant of concern. Other metals, such as arsenic, were also identified as contaminants of concern, but were eliminated due to their relatively low risk and lack of connection to the release from the institutional sources being addressed by this Superfund action.

The EPA uses the Integrated Exposure Uptake Biokinetic (IEUBK) model to evaluate the risk that lead contamination of soil poses to children less than seven years of age. The IEUBK model uses either site-specific inputs (if available) or default inputs to estimate the probability that a child's blood lead level might exceed a health-based standard of 10 micrograms per deciliter. If only default values are used as inputs to the model, a child would have less than a 5 percent probability of having a blood lead level at or above the $10 \,\mu\text{g/dL}$ if the soil in that child's environment had no more than 400 ppm of lead in the soil.

EPA Region 7 will test soil in the yards of all residential property in the Omaha Lead Superfund Site area for lead.

This testing will include the drip line area of the residence. Participating in the environmental sampling program will be with no cost to participants. Properties where soil sampling has not previously been performed will be automatically eligible for soil sampling by EPA Region 7. Properties where previous sampling was performed, but where conditions have changed, will be eligible for limited re-testing.

5.1.2 Residences

The DCHD inspector will inspect residences where a child has been identified with an elevated blood lead level. The DCHD inspector will investigate for deteriorating lead-based paint, both exterior and interior, and interior dust. Inquiries with the family will determine the possibility of other sources of lead.

EPA will receive information on residences where a child with an EBL resides so they can perform a soil sampling.

Where soil has been investigated and is determined to need remediation, the EPA Region 7 will determine if the residence has deteriorating lead-based paint on ten percent of more of the exterior surface. In these instances, EPA will remove the deteriorating lead-based paint and possibly repaint the exterior of the residence.

EPA will also test the interior dust of residences where the soil will be remediated to determine if dust contains lead. Where lead dust is found in the residence, EPA will contract for a thorough cleaning according to HUD.

HUD funded programs with the City of Omaha will assist eligible low and moderate income property owners applying for grants to renovate their homes with remediation of the deteriorating lead-based paint identified on their property.

The Alliance will investigate the possibility of obtaining funds to assist residents in having their residences inspected for lead-based paint hazards and in remediation of identified lead-based paint hazards found in both exterior and interior of homes. Persons participating in the Alliance's environmental sampling program will be asked to sign an access agreement. The agreement grants permission to use demographic information obtained through a questionnaire, sample the property, and obtain other information to assist in evaluating lead exposure.

5.1.3 Water and Other Possible Sources

Other potential sources of lead hazards will be investigated when inspectors or risk assessors determine the need.

Property owners and residents will be provided information on lead hazard sources identified and suggested remediation procedures. This information will be provided in the primary language of the property owner and resident to ensure their understanding of the issues and need for cooperation. Information on the Alliance and services will be provided to the property owner and tenant.

5.2 Source Remediation

The results of environmental investigations – soil, dust, lead-based paint, other – will be provided to property owner and tenant. Recommendations for remediation will be made by 1) EPA for soil and dust; and 2) DCHD, City inspectors, and/or certified risk assessors for lead-based paint and other sources. Remediation actions will be implemented in accordance with applicable City codes, HUD's Guidelines for the Evaluation and Control of Lead-based Paint

Hazards in Housing (June 1995), and EPA's Record of Decision for the Omaha Lead Site (to be released).

At the completion of remediation activities, property owners and tenants will be provided with instructions for maintaining components of the remedy, such as sod, landscaping, paint interim controls or abatement. The maintenance of each remediation activity will be fully explained to the property owner and tenants during discussion of recommended actions and upon completion of the selected action(s).

EPA Remedial Action Objectives for the Omaha Lead Site:

- One Remedial Action Objective has been developed for residential soils in Omaha
- Reduce the risk of exposure of young children to lead such that an individual child or group of similarly exposed children, have no greater than a 5 per cent chance of having a blood-lead concentration exceeding 10 µg/dL.

5.2.1 Soil

EPA's preferred alternative involves the excavation and removal of soil, backfilling the excavation with clean soil, and restoring the grass lawn. Excavation will be performed at properties where exposure potential is of greatest concern. Generally, the properties that will be designated for response include: 1) residences exceeding 400 ppm lead where children with elevated blood lead levels reside; 2) child care facilities exceeding 400 ppm lead; 3) high child impact areas such as a park or school exceeding 400 ppm; or 4) any residential property where at least one non-foundation sample exceeds 800 ppm.

Soil will be excavated using lightweight excavation equipment and hand tools in the portions of the yard where the surface soil exceeds 400 ppm lead. For child care facilities, residences that house children with EBLs and high child impact areas, soil clean-up will be initiated if at least one non-drip zone sample exceeds 400 ppm lead. Excavation will continue until the lead concentration measured at the exposed surface of the excavation is less than 400 ppm in the initial foot, or less than 1,200 ppm at depths greater than one foot. The excavation will cease at less than 12 inches if soil lead concentrations below 400 ppm are encountered within the initial foot of excavation.

Clean fill and topsoil will be used to replace the soil removed after excavation, returning the yard to its original elevation and grade. After the topsoil has been replaced a grass lawn will be re-established through either hydro-seeding or sodding.

The objective of soil remediation is to either remove the source of lead or eliminate the pathway of exposure. If EPA's soil action level (to be determined) is exceeded, remediation activities may be taken, including soil removals, capping, landscaping, raised beds for gardens, and/or phosphate remediation if such remediation is determined to be feasible.

1) **Removal:** EPA will perform soil removals as described in the Record of Decision for the Omaha Lead Site when the Record of Decision is released.

In the process of identifying appropriate options and recommendations for soil remediation, the condition of existing vegetation, the use patterns of the property, and current drainage patterns within and adjacent to a property will be evaluated.

During remediation activities, clean access to the residence will be provided at all times. Clean access means the resident will not have to walk through soil prior to entering their home. Sidewalks will be thoroughly brushed and washed off with water after each workday to provide as clean an entry as possible to the residence. In the absence of a sidewalk, laying down plywood, pallets, plastic, or using other temporary measures to prevent exposure and tracking of soils will provide a clean pathway to the residence. All residents will be required to stay away from the construction area during remediation activities. Unsafe excavation areas or stockpiled soils will be fenced off to prevent accidents and exposure.

Water application will be used to minimize the potential for fugitive dust emissions. Application rates will be regulated to control dust during excavation, yet prevent the development of mud. The objective is to minimize airborne dust and minimize the production of mud that could be transported off-site on haul trucks and other mobile equipment. Outdoor faucets and hydrants from private residences and public areas will be used as water supply sources.

- 2) **Capping:** Concrete and asphalt caps are generally constructed in high traffic areas such as driveways, porches, and sidewalks. The use of asphalt or concrete as a cover material will be limited to special circumstances, which may include:
 - Situations requiring the removal of existing concrete or asphalt
 - In limited areas at the property owner's request to match adjacent existing paved areas; and
 - Where removal is not practicable and the placement of concrete or asphalt is a cost effective alternative.
- 3) Raised Beds for Gardens: Raised beds are gardens formed by adding contained soil (below the action level) on top of present soil. Raised beds may be considered as a response action for existing vegetable gardens with lead in soil concentrations. Education will be provided to residents encouraging the use of mulch and straw to prevent garden soil from eroding.
- 4) Landscaping: Landscaping techniques may be considered as a remediation activity to contain lead particles. Landscaping techniques will most commonly be utilized for areas in which grass cover cannot be established (e.g. near trees or buildings). Landscaping techniques include covering bare areas with mulch, crushed stone, landscaping cloth, sand, woodchips, or sod and/or planning shrubs to create a barrier to lead exposure.
- 5) **Drip-line:** Drip-line soil removal actions will be performed if drip-line soil exceeds the action level (to be determined) for lead. If it is determined that exterior paint requires remediation, remediation activities will be performed before drip-line soil

removal. Drip line soil response actions will also be performed if clearance soil samples taken following lead-based paint remediation have increased in lead concentration from samples taken prior to lead-based paint remediation. Drip-line soil removal actions will be the same as other soil removal actions.

5.2.2 Lead-Based Paint

Education is an important component of all lead-based paint remediation actions. When lead-based paint is present, property owners and tenants will be educated as to the risk related to deteriorating lead-based paint and ways to reduce exposure to identified lead hazards. In addition to the one-on-one information provided, materials and workshops will be available to provide education to property owners and tenants.

Lead-based paint remediation activities (interim controls or abatement) will be performed in accordance with HUD's *Guidelines for the Evaluation and Control of Lead-based Paint Hazards in Housing (June 1995)*.

Under the Lead-Based Paint Poisoning Prevention Act of 1992, paint is considered lead-base paint if it contains lead greater than or equal to 1.0 mg/cm2. Based on this definition, if paint is found containing lead above 1 mg/cm2 and is in poor condition or coating a friction surface, education will be provided to help reduce potential risks associated with lead-based paint and the need for additional remediation actions will be evaluated by a risk assessor. Property owners and tenants will be notified of the dangers associated with remediation actions due to the potential for increased exposure during these activities prior to the start of any lead-based paint remediation activities.

Measures will be taken to protect residents from exposure to lead-based paint hazards during remediation activities. At a minimum, residents will be required to stay out of work and containment areas. Residents will be required to be out of the residence while remediation activities are being implemented. The need for temporary relocation of the residents during interior and/or exterior paint remediation will be considered on a case-by-case basis, depending on the area of the home affected by activities, the kind of containment required, and the anticipated duration of remediation activities.

5.2.3 **Dust**

Since dust is a secondary lead source generated from soil, lead-based paint, or other sources, it will be necessary to identify and remediate the primary source followed by a dust action.

Dust removal actions may include education, physical protective measures, and/or removal and disposal. Dust removal and control actions will be typically recommended in situations where lead in interior paint is below an action level and the paint is in good condition. Dust removal and control actions will be conducted to remove the dust accumulation generated by lead-containing soils and other materials that have been tracked into the residence and will be implemented in accordance with HUD's <u>Guidelines for the Evaluation and Control of Lead-based Paint Hazards in Housing (June 1995).</u>

Residents will be educated on how to effectively reduce lead dust through cleaning activities. Residents will also be offered the use of a vacuum cleaner equipped with a HEPA filter via the HEPA vacuum loan program. HEPA vacuums are capable of removing particles greater than or equal to 0.3 microns at an efficiency of 99.97 percent. Use of the vacuum program provided by community-based organizations will be available to all residents at no cost.

5.2.4 Water, Air and Other Sources

Tap water remediation actions will be recommended where residences with lead concentrations in drinking water greater than or equal to 15 parts per billion (ppb). Sources of lead in drinking water that may be addressed include lead pipes, lead solder, and/or lead-alloy fixtures. Where investigations determine that other sources of lead are available in hazardous states, appropriate actions will be taken to remediate the source.

5.3 Surveillance

Surveillance (monitoring) of residential properties needs to be established to provide data on residential properties 1) inspected for lead hazards, 2) remediation of lead-based paint was performed, 3) soil removal was performed, 4) follow-up inspections to determine properties remain lead-safe.

6.0 Coordination and Collaboration

6.1 Alliance Role and Responsibilities

The establishment of an Omaha Lead Superfund Site Alliance will facilitate the coordination of services by collaborative efforts of the various service providers presently providing service components or those who will provide various services in the future. The Alliance can be an entity affiliated with an existing agency or be a newly established non-profit entity. (501 (c) (3).

The Alliance will have a membership of any interested party residing in the OLS area, representatives of service providers or interested community-based organizations, representatives of governmental agencies both local and state, and parents of young children residing in the OLS area. The membership will assist in providing feedback as to the implementation of a comprehensive plan to eliminate lead poisoning.

A coordinator will be hired to provide leadership in the implementation of a comprehensive plan to eliminate lead poisoning in the OLS area. The coordinator will be guided by an advisory/steering committee made up of five to nine members elected from the membership and including four parents of children with an elevated blood lead level from the OLS area – representing the culturally diverse community. Task forces/work groups headed by a member of the advisory/steering committee will address each component of the comprehensive plan.

The coordinator will be responsible for developing a work plan for the Alliance including activities to be provided by the Alliance, responsible parties, and timelines for implementation. In developing the work plan, the implementation of a logic model as presently required by many federal agencies will assist in preparing proposals for funding. The coordinator will investigate possible funding and either applies for funds for the Alliance or encourages and assists Alliance members in applying for funds to implement the Comprehensive Plan to Eliminate Lead Poisoning in the Omaha Lead Site area.

The establishment of an Omaha Lead Site Alliance will have as its goal the coordination and collaboration by service providers in efforts to reduce children's exposure to lead and eliminate lead hazards from their environments.

6.2 Current service Providers

A summary of services currently provided is included in Table 1.

Table 1 – Present and Potential Service Providers

COMPONENT/ DEFINITION	SERVICE/ DEFINITION	PRESENT PROVIDERS	POTENTIAL PROVIDERS
Plan	Coordination of services to be	To be determined	IKOVIDEKS
administration	implemented via plan.	10 be determined	
Advisory/Steering	Assist in coordination activities	To be determined	
Committee	rissist in coordination activities	(5 members plus 4 parents)	
Alliance Members	Advise Alliance coordinator and	Representatives from:	Other
7 manee Wembers	advisory committee on service	- Government	interested
	coordination and plan	Agencies	parties from
	implementation	- Service Providers	the OLS area
		- Medical Providers	
		- Community	
		- Owners	
		- Tenants	
		- Etc.	
Services	Awareness/Outreach	DCHD, NUIHC, LSOC,	
		CAC, LWVGO, CDREW,	
		ONEWORLD,	
		SISTERSTOG, SIERRA	
		CLUB, HOPE MOC,	
		NAACP	
	Education-public	DCHD, LSOC	
	Education-providers	DCHD, LSOC	
	Education- medical	DCHD, MOMS	
	Screening Children	PHYSICIANS, CLINICS,	
		DCHD, LSOC	
	Case Management for EBLs	DCHD	
	Id housing w/ lead-based paint	DCHD, CITY	
	Provide training for owners	DCHD, EXT SERVICE	
	Provide training for workers	MASIMAX, DCHD, LSOC	
	Identify soil contamination	EPA	
	Provide temporary LBP cleaning	EPA	
	Remediate lead-based paint	CITY, PROPERTY	
		OWNER	
	Remediate soil	EPA	
	Monitor remediation	DCHD, City, EPA	
Ordinances/	Federal		
Regulations	State		
	Local		
Program	Evaluation components		
Evaluation	- Program implementation		
	- Community perceptions		
Advocacy	Community organizations	LSOC	
		OLS CAG	

6.3 Expanded and Improved Services

Through the collaborative efforts of service providers with the Alliance, outreach and public awareness will be expanded and provided by multiple community resources including churches, schools, social service agencies, and others. Health education funds from EPA/ATSDR and the State of Nebraska will assist in improving and expanding these services under the direction of the Douglas County Health Department.

Families (residents or property owners) will learn about the Omaha Superfund Lead Site and the potential impact on their property and their children. Door to door canvassing will be provided to get this information to the OLS residents and make them aware of the problems and services available. A phone line manned by bilingual persons knowledgeable in lead issues will be available for citizens to call. Efforts will be made to have this service available after normal business hours.

Children who are uninsured and not eligible for Medicaid will be provided blood lead tests at no costs. The Alliance will seek funding when an uninsured child has a lead level that requires chelation and/or medical follow-up will be provided these services at no cost.

Training will be provided to property owners and maintenance workers on how to work safely when they are disturbing lead-based paint. Information about this training will be made by various media sources, community agencies and DCHD. The training will be provided at minimum or no cost.

Efforts will be made to identify potential funding sources to assist property owners in remediation of the lead-based paint identified on their property.

6.4 Research

Research related to the OLS will be encouraged by the Alliance and provided through collaborative efforts of the Nebraska Health and Human Services System, the University of Nebraska Medical Center, Creighton University, the University of Nebraska at Omaha, the Douglas County Health Department, and others.

6.5 Funding

Sources for funding to support the Alliance coordinator and the Alliance activities will be investigated. Possible sources are EPA/ATSDR, State of Nebraska, potential responsible parties, community foundations, community corporations, and others.

6.6 Evaluation

Procedures will be developed to evaluate the activities of the Alliance and the impact of those activities on reducing lead poisoning in the OLS area. A logic model used to develop program activities and procedures will include appropriate evaluation measures.

Douglas County Health Department Lead Poisoning Elimination Work Plan

Goal: By 2010 Eliminate Blood Lead Levels ≥10ug/dl in Douglas County Children

November 2004

Inputs	Outputs	Outcomes
DCHD	DCHD Physician Recruitment	A. Screening
Metro Omaha Medical Society	Revised Screening Questionnaire	Increase blood lead testing rates for children 6 years of age
Omaha Pediatricians	Social Marketing Plan	and under living in 11 Target Zip Codes.
Health Insurance Companies	"To Be My Best, I Need a Lead Test" –	
Women Infant Children Program	Campaign (Already Implemented)	
	Implementation Date: Jan.1, 2005	
DCHD	Draft a lead hazard ordinance for Omaha	B. Lead Safe Housing
Omaha City Council	requiring treatment or abatement of lead hazards	By 2010, eliminate lead-based paint hazards in Target Zip Code
Omaha Lead Site-Community Advisory	in housing where children reside or frequently	housing where children 6 and younger reside.
Group	visit, regardless of blood lead levels. Require	
City of Omaha Planning Department	registration of rental property.	
	Implementation Date: November 1, 2004	
DCHD	Enlist City Councilman to sponsor lead	
City of Omaha Planning Dept.	ordinance. Implementation Date: January 1,	
Lead Safe Omaha Coalition	2005	
DCHD	Leverage private funds for residential lead-based	
Omaha Lead Site-Community Advisory	paint hazard reduction projects (located in	
Group	Target Zip Codes) for homeowners in need of	
Lead Safe Omaha Coalition	assistance.	
City of Omaha	Implementation Date: July 1, 2005	

Inputs	Outputs	Outcomes
DCHD Douglas County Board of Health	Draft rules and regulations for Douglas County requiring treatment or abatement of lead hazards in housing where children reside or frequently visit, regardless of blood lead levels. Implementation Date: April 1, 2005	B. Lead Safe Housing(continued)
DCHD	CLPPP Program changes to initiate Environmental Investigations when child has a confirmed blood lead level at 10 ug/dl rather than 15 ug/dl. Implementation Date: January 1, 2005 Require follow-up inspections on remediated housing at 6-month intervals for two year period.	C. Improve Secondary Prevention

Inputs	Outputs	Outcomes
DCHD	Education and Awareness campaign on need to	D. Lead Poisoning Awareness and Education
Medical Providers	screen children.	
Head Start Programs	"Sipper Cup" distribution	
Health Insurers	DCHD education to medical	
	providers	
	Community Health Worker plan	
	implementation	
	Promote screening for every child in Douglas	
	County at 1, 2, and 3 years of age.	
	 Recommend 6 month re-test for any 	
	child with a blood lead level of 7-9	
	ug/dl.	
	 Provide or coordinate testing through 	
	Head Start/Early Head Start	
	programs.	
	Recruit insurance companies to provide	
	mailings to Medicaid enrollees.	
Douglas County Extension Service	Design lead education curricula for realtors.	
DOTTO	Provide bi-monthly Lead Safe Work Practices	
DCHD Masi Max Environmental Services	training for painters, remodelers, maintenance	
Wiasi Wax Environmental Services	workers, landlords, tenants, and homeowners.	
DCHD	Social marketing and advertising plan.	

Douglas County Health Department Elimination Work Plan

A. Screening

Objective 1: Increase blood lead screening rates yearly for the next five years to 15,000 children per year (over 2/3 of the population of children 6 and less in the Target Zip Codes) by the beginning of calendar year 2010.

Douglas County Health Department Approach:

The Douglas County CLPPP will hire one full time medical case manager to assist in fulfilling CDC requirements for completing case management for all children screened within the county. This would allow the CLPPP to shift duties of its Lead Program Coordinator to begin working full time on cooperative agreement activities. The Douglas County Health Department will utilize a 7-pronged approach to increase blood lead testing in Douglas County.

Objective 1A: Recruit Medical Providers to Increase Number of Children Tested by 20 % annually for next 5 years.

The Lead Program Coordinator will conduct on-site visits at 90 physician's offices per year and consult with physicians or key office staff. Screening data will be discussed indicating what screening numbers are being accomplished currently in the target zip codes and how those numbers can be increased. Past experience in Douglas County has shown that to increase the number of kids being tested, efforts conducted at the medical institutions must occur. Health fairs and community events may increase testing numbers temporarily, i.e., kids may get tested on a one time basis, but to achieve continued routine blood lead testing, physicians must be involved.

Reports detailing the number of children each provider is testing can be generated in the CLPPP STELLAR database. Reports can be generated for any time period, e.g., annually, quarterly, etc. These reports will be provided to physicians and will be compared with the number of children accessing medical care during the same timeline. The comparison might indicate that some missed opportunities have occurred in the office. The Lead Program Coordinator can assist the physician's staff in assessing what children should be tested in the near future. Physician offices will be visited twice per year to evaluate testing performance.

Objective 2A: Increase the number of Medicaid children tested by 15 % annually for next 5 years.

In 2003, 1,981 Medicaid children were tested for lead poisoning. However, the CLPPP does not know how many Medicaid children exist in Douglas County. The LPC will meet with Access Medicaid staff to determine what access the CLPPP can get to a Medicaid enrollee database. If access is granted the database will be compared to STELLAR files to determine which Medicaid children have not been tested. At this point, the CLPPP can generate letters to parents detailing requirements that their children must be tested. CLPPP staff will track whether the kids that have been enumerated have been tested through use of the STELLAR database. If direct access to the Medicaid database is not allowed, the LPC will use a second approach. Access Medicaid assigns Medicaid eligible children to various providers based on what insurance company the family selects. If Share Advantage is selected, children are assigned to a certain provider and if Blue Cross is selected they may be assigned to a different provider. Access Medicaid will provide the names of medical providers that have been assigned Medicaid enrollees. The LPC will then visit those providers to determine which children have not received required testing and encourage the medical providers to provide testing. CLPPP staff will monitor progress with the STELLAR database.

Objective 3A: Recruit Health Insurance companies to enclose 10,000 CLPPP lead poisoning flyers in mailings to Medicaid enrollees.

As a back-up plan to Objective 1B, the LPC will contact Health Insurers to encourage them to insert our "At 1, 2, and 3 Get a Lead Test for Me" flyer in their routine mailings to their Medicaid clients. This links to the same screening message that will be delivered to provider offices in poster form by another grant funded program. After flyers have been delivered, CLPPP staff will track all Medicaid children who have been tested using the STELLAR database, and contact families to determine if the mailings spurred the testing of their child.

Objective 4A: By October 1, 2005, establish a pilot project with the Douglas County WIC program to begin testing blood lead levels of enrolled children that reside in Superfund site.

Children enrolled in WIC are the same children eligible for Medicaid insurance, therefore by beginning to test more WIC children at their various clinics may achieve the testing of Medicaid eligible or Medicaid enrolled children. Anecdotal evidence suggests that WIC enrolled families participate because of the food provided to them and that they do not access regular medical care because of perceived hassles or problems. Thus, there is a good possibility that we will test children we might miss by focusing on Medicaid children. The LPC and Lead Program Specialist will work

with the families to encourage them to enroll in Medicaid and encourage routine lead testing.

Objective 5A: By July 1, 2010 test 100% of children 6 years or younger whose properties have received soil remediation by EPA.

EPA has assured the DCHD that it will provide the database consisting of addresses of properties that have received soil remediation where children 6 and younger reside. The current estimate for soil removals in the Superfund site is 5600 properties. It is unknown how many of these properties have children 6 or younger residing there. The CLPPP will contact all of these families and ensure free blood lead testing of their children. A separate database will be designed to monitor these children linked to soil remediation activities.

Objective 6A: By January 1, 2006 meet twice with the Metro Omaha Medical Society to follow up on new screening questionnaire and to provide up-dates to physicians about current screening numbers of children residing in the Superfund site.

In 2003, at the behest of physician members of the Metro Omaha Medical Society, the CLPPP re-designed its screening questionnaire to make it more compact, more easily understood, and easier for parents to fill out. Physicians promised the CLPPP more testing of children if this was accomplished. The questionnaire was also designed so that one form could be used in a child's medical file for 6 years. The CLPPP will meet with MOMS to determine if further refinement is needed to assist physicians in increasing the number of kids being tested.

Objective 7A: By June 1, 2005 complete a social marketing plan utilizing advertising to accent the need for blood lead testing of children in Douglas County.

Advertising by billboards and transit buses in the Superfund areas has never been tried in Douglas County. The CLPPP believes that these methods could be helpful in increasing the number of children getting tested. The CLPPP and Health Promotion section will partner to devise a comprehensive media blitz at the same time as securing advertisement space on a billboard(s) or buses. The plan would include a press release to all media outlets, a press conference covered by the television media, radio media, and a scheduled saturation into neighborhoods by Community Health Workers (CHWs) the same day. The CLPPP will utilize posters such as the "At 1, 2 and 3 Get a Lead Test for Me!" or might include educational messages derived from feedback obtained from the affected communities.

"Sipper Cup" Campaign

Objectives:

The Douglas County Health Department Lead Program, located in Omaha, Nebraska, offers primary and secondary prevention services to the largest concentrated population base in the state. According to the 2000 Census, there are over 47,000 children under the age of 7 years in the county. Over 20,000 of these children live in 11 ZIP codes where almost 60% of the housing units were built before 1950. Over 80% of the total minority population in Douglas County lives in these 11 ZIP codes. A large segment of this area is also under consideration for listing on the National Priorities List as a "Superfund" site due to elevated soil lead levels possibly linked to prior industrial exposure.

In 2003, only 6,530 children in these 11 ZIP codes received a blood lead test (30%) with 303 of them testing at or above 10 ug/dL (4.8% of those tested). The screening rates for the entire county averaged 20% in 2003, with 9,598 children receiving testing and 339 children testing at or above 10 ug/dL (3.5 % of those tested). Historically, only 45% of 463 children with lead levels ≥ 15 ug/dL between 1996 and 2001 were diagnosed or experienced their highest levels by 24 months of age. Minority children represented over 67% of these children, while minorities represent less than 20% of the total county population.

Screening rates in Douglas County have increased significantly since 1998 when only 3,447 children were tested. We believe there are still additional activities we can add to our current program to make our efforts more effective. In reviewing strategies being used by other programs, three issues were identified as areas where we could use additional materials to increase the impact of our base program.

Our basic strategy for screening, education, and outreach opportunities throughout the year is to network with existing community-based events as a partner. Our expanded plan will center on developing an item to "give away" to families at events to promote our program and its goals. We feel the item should retain its effectiveness over time, especially while a child is 1-3 years of age, regardless of when it is given to the parent. We also feel there is a need for better signage to identify the program and its message when we are doing community outreach. In addition, we need funding for basic cleaning supplies to share with families who are in case management because they have a child with lead exposure.

The principal objectives are:

- Increase blood lead screening, especially for children 1-3 years of age in high risk areas of the county, for early detection and intervention of lead exposure
- Promote the reduction of dust levels in homes through adequate cleaning, which can affect lead exposure and asthma triggers

- Increase program awareness in the community for promotion of primary prevention strategies
- Strengthen partnerships with community providers to increase the number of sites where families can access information, testing, or other services for lead and indoor air concerns

Subordinate objectives include:

- Increase blood lead screening for all children in Douglas County under seven years of age for detection and intervention of lead exposure
- Promote parent, medical provider, and program interaction and responsibility to reduce lead exposure and increase screening rates
- Network within the Douglas County Health Department to promote indoor air quality programs already in place while doing lead program activities.

Results or Expected Benefits

Implementation of this action plan is expected to produce the following benefits to the community:

- Identify more children with elevated blood lead levels early in the course of their exposure and begin intervention, which should reduce the risk of negative outcomes.
- Hands-on training and supplies will be provided for families with lead exposed children
 to clean their homes and reduce dust levels. Follow-up with the family after supplies are
 made available should increase the likelihood that the family will make sustained life-style
 changes in their household routines that lower lead dust levels.
- More members of the community will become aware of services they can access. This
 will become even more important when the Superfund Record of Decision is finalized.
- Key medical and non-profit service providers will be actively recruited as ongoing
 partners. These partners will become access sites to the community for education,
 outreach, and services regarding lead and indoor air environmental health concerns.
- Parents, medical providers, and the community as a whole will be given the opportunity to learn about lead and indoor air quality and access services as appropriate.
- The program will develop "goodwill" in the community regarding the DCHD Lead Program because of services offered and incentive items.
- Separate programs within the Douglas County Health Department that address indoor
 air quality and lead issues will utilize the contacts and outreach of each other to further
 disseminate individual program materials to a wider audience. This will help increase the
 effectiveness of each program without expanding labor costs.

Approach

Two key slogans will be utilized for all the materials. The DCHD name and contact information and appropriate graphics will be included. The first slogan is aimed at primary prevention – addressing housing and soil lead issues and will be on one banner, as well as on half of the stickers and magnets in English and Spanish. "Got Lead? Get Help!"

The second slogan and graphics will target yearly lead screening for all children in Douglas County at 1, 2, and 3 years of age. It will be on the front and back of the sipper cup, on one banner, and on half of the stickers and magnets in English and Spanish.

"To Be My Best, I Need a Lead Test!"
"At 1, 2, and 3 – Get a Lead Test for Me!"

The materials attained with this grant will include the following:

- Supplemental materials for use with case management, including brochures specific to pregnancy, cleaning, parenting and learning, and an overview of lead information in the form of a growth chart.
- Supplies for Cleaning Kits to distribute at case management home visits with families of elevated blood lead children.
- Banners to be used at community events and training sessions to build community awareness.
- Stickers in English and Spanish with their lower price will be a give-away item at community events and screening to increase general awareness in the community.
- Magnets in English and Spanish will be targeted to property owners, landlords, families
 with small children and those participating in case management, screening, training, or
 primary prevention activities where we want to be sure our name, contact information,
 and message stays visible over time on the family refrigerator or landlord's filing cabinet.
- Miscellaneous supplies for use with training demonstrations for both primary and secondary prevention.
- Sipper cups "To Be My Best, I Need A Lead Test" Screening Campaign Outreach Plan to Families with Children under 4 years of age.

The screening campaign will begin with the recruiting of medical providers or clinics that provide care to children living in the high risk areas. These will be sites committed to testing all children at 1, 2, and 3 years of age as a minimum standard. The clinic will distribute the cup at a designated time such as the 1 month check-up or first office visit to the clinic. Each cup will include the EPA tri-fold lead flier and a flier or brochure on indoor air quality. Labels on these fliers will list Douglas County Health Department contact information.

The clinic will ask the family to complete a registration card before leaving their site. It will contain a site identifier, the parent(s) name, the child's name and birth date, home address, phone and a choice to enroll the child in the "One of the Best Club." These cards will be collected from the clinics every two to four weeks. Information on the registration card will

be entered into an Excel spread sheet at Douglas County. It will be used to generate mailing labels and also serve as the basis for evaluation and monitoring of the program. Families will be placed on a periodic mailing list which will include these scheduled mailings:

- An expanded lead information packet including the EPA Parent Book, the DCHD
 Who Ya Gonna Call-Why are We Concerned flier, the DCHD Soil Lead Fact sheet,
 an Omaha Lead-based Paint Hazard Control Program (HUD grant) flier, and a To
 Be My Best Magnet.
- Periodic newsletters or updates
- Birthday postcards with a reminder to get testing a month before 1,2,3 birthdays
 - O When a member child test result is received at the DCHD, they will be sent a "gift" (story or coloring book, T-shirt, etc. dependent on availability)

Every quarter, the campaign data will be reviewed for the following evaluations:

- compared to the DCHD STELLAR surveillance database to see how many participants have been tested
- tally total numbers of contacts made through sipper cup program
- tally how many lead tests have been done by each participating clinic or medical provider and report that information back to the site

Additional options to implementation include working with local obstetrical programs to distribute the cups/information to pregnant moms (over 7000 local births/year in Douglas Co.), sending sipper cup packs out to local families when we get results on children under two years of age to promote repeat testing, and signing up families for packet distribution at community events, WIC clinics and community agencies.

The following listing provides a summary of the rationales, problems addressed, and benefits sought through this expanded screening campaign:

- Sipper Cup with removable flip top:
 - Has key screening message; design of cup chosen (sipper lid is removable for use as a regular glass) should allow continued use over entire target age group, keeping message in front of parents.
 - Item that will be kept and used regardless of age of child when cup is given to family
 - Item that can be used for various ages of children
 - Item that can be taken out into the community without spilling
 - Item that keeps the message to screen in front of families over time and can be used by other children in the family
 - One of the Best Club:
 - Allows us to send or give more information directly to families, including a
 magnet for the refrigerator and other incentives to keep the family thinking
 about lead issues over an extended time period

- Gives us a database to compare who received the sipper cups with which children are tested - measurable outcome
- Partnering with clinics:
- Allows penetration to the community to get information to families with young children
- Acts as a reminder to the clinics to give the family anticipatory guidance regarding lead
- Promotes the idea of lead testing being done by the primary medical provider. We can also give the clinics feedback regarding participation of their patients
- Allows DCHD to work with the clinics on a regular basis which keeps lead in their thoughts
- Allows DCHD to track how many cups were given out
- Brochures given with sipper cup:
- Ensures at least one contact opportunity to get lead and indoor air information to the family, regardless of their continued participation
- Registration card to enroll
- Encourages the family to make the decision to participate rather than just having the clinic report the information to us encouraging families to become an active participant
- Minimizes the extra work required of clinics
- Initial Family Lead Packet
- An incentive to the family to participate and gain more information
- Newsletters, Birthday Reminder, etc.
- Regular contact with family helps keep address information current to allow continued participation
- Keep lead issues in front of family
- Increase screening
- Raise visibility in community of DCHD
- Program puts a positive twist on a negative problem
- Activity sheets can be included to get older children involved in prevention
- Venue to pass on information to the community
- Incentives gifts for child
- Goal: Increase screening
- Goal: Increase attention family gives to lead information
- Chosen to have lasting use or value while still being a desired item
 - If t-shirt, item that could be worn out in public to spread message
- Positive image builder for DCHD
- Participation needed by family to receive most incentives.
 - Cost of program is tied to success of program to gain participation family has to choose to participate. If beyond budget of DCHD, will look for outside sponsor

- Outcomes measuring increases in number of children tested by monitoring blood lead tests from:
 - Clinics who participate in program
 - One of the Best Club participants
 - Douglas County as a whole reside

B. Lead-based Paint Hazard Regulation and Enforcement

- 1. Because of a recent Douglas County Attorney legal opinion, the Douglas County Health Department has no lead hazard enforcement tool to protect children. Currently DCHD is working with landlords and owner-occupants to remediate lead hazards using interim control methods on a voluntary basis. DCHD has begun to draft a lead hazard ordinance enforceable within the City of Omaha and its 3-mile statutory limit to require lead hazard remediation in any dwelling or child care facility where a child 6 and younger resides or regularly visits. DCHD will work with the City of Omaha Housing Division to achieve passage of an ordinance. The ordinance will be written such that City of Omaha Housing Inspectors can refer findings of lead-based paint hazards to DCHD for enforcement.
- 2. The Douglas County Health Department will continue its formal partnership with Region VII of EPA in surveying tenants to determine if landlords are in compliance with EPA's 1018 rule requiring disclosure of lead-based paint or lead-based paint hazards. Since 2002, DCHD has surveyed all parents of EBL children (who live in rental housing) as to whether or not their landlord properly disclosed information to them regarding lead-based paint in the rental unit.

C. Secondary Prevention

On January 1, 2005 the DCHD CLPP program will begin to provide Environmental Investigations in homes where children with confirmed blood lead levels of 10 ug/dl or greater reside. Prior to this, the program provided investigations at confirmed levels of 15 ug/dl or greater. Lead hazard reduction interventions at lower blood lead levels will reduce blood lead levels in children living in the Target Zip Codes.

DCHD CLPPP staff inspectors will perform follow-up inspections at 6-month intervals at all dwellings that have had lead hazard reduction projects completed and will continue follow-up inspections for a period of two years. This will ensure that proper maintenance activities are being performed by the homeowner or tenant thus protecting children by reducing exposure to lead hazards.

D. Lead Awareness and Education

1. Community Health Worker Training

This program component will be responsible for training CHWs to deliver culturally appropriate health messages of the dangers of elevated blood lead levels to their communities. Target populations are African American, Native American, Sudanese, and Hispanic communities, primarily in North and South Eastern Douglas County, who live in the Omaha lead refinery superfund site.

A CHW is a member of the community and serves as a link between communities, community members, governmental and community organizations, and social services. Because CHW are people OF the community they are readily accepted within the social and cultural norms of their target population and can easily deliver health information without experiencing cultural, language, and access barriers.

The DCHD is in a unique position to deliver this program as we will utilize our existing *Outreach to Minority Communities Program* as the cornerstone for recruiting and training CHWs to reach high risk populations of Douglas County. This program currently contracts with four community agencies to house CHWs who work in collaboration with DCHD staff in implementing health initiatives in their specific communities. These current CHWs will assist in the pilot project, which will last 4 weeks, beginning in July 2004 and completed by August, 2004. The pilot project will recruit up to 12 CHW trainees who will work with existing staff in delivering health messages to the community. After the pilot project is completed and evaluated, the project will be implemented a second time in the Spring of 2005, utilizing additional CHWs recruited from the community and refining the strategies that proved most successful during the pilot project.

GOAL 1: To deliver culturally appropriate health education to minority communities in the target population regarding lead poisoning prevention by April 2005.

Objective 1: By August 2004, a culturally appropriate training program will be developed and implemented that will utilize community health workers to educate the community about lead safety issues.

- The Health Promotion Staff of the Douglas County Health Department will develop and implement an outreach training program that is culturally appropriate to each of four minority community populations: African American, Native American, Sudanese, and Hispanic. Six Community Health Workers (CHWs) from these populations are currently working under contract with the Douglas County Health Department. They will be trained in health issues pertaining to lead poisoning with 4 main messages:
- Have your child tested for Lead at 1,2,3 and then in high risk areas at ages 4,5,6
- Keep children away from peeling paint

- Remove shoes at the door to reduce lead exposure in the home
- Wash hands and toys to reduce hand to mouth exposure to lead
- Risks associated with living in the superfund site, including soil, gardening, and paint

In addition to this content based training, a culturally sensitive skill-based training will be provided to all CHW trainees that will be recruited for a field project. This training addresses 8 core competencies of the community health worker and includes: communication, interpersonal skills, knowledge base, service coordination, capacity building, advocacy, teaching skills, and organizational skills. This will ensure a well-rounded CHW trainee in the field. We will then recruit up to 12 additional community health worker trainees from these four communities to carry out an initial field pilot project in which CHWs will go back to their own communities to deliver health information.

Objective 2: A field training pilot project will be implemented using CHWs by August 2004.

The first field training pilot project will be a 4-week project beginning in July 2004 and will be completed by August 2004. Current contracting agencies will hire and oversee 3-4 CHW trainees (per agency) who will complete the newly developed training program on lead health issues and strategies to communicate this information to their communities. After completing the training, each CHW trainee will work between 10-20 hours per week over a 4 week period to "get the word out" about lead. CHWs that are currently contracted by the DCHD will assist in recruiting, training, and working alongside the trainees in order to complete this project.

Strategies have been discussed and each agency will utilize strategies that work best for their population. This will be decided upon prior to beginning the field project. Many of the strategies listed below will be utilized, but we will also consider additional strategies after brainstorming with new trainees during our training sessions. Some of the strategies listed below have already been utilized successfully through the *Outreach to Minority Health Project* of the DCHD.

- Home visits
- Education provided during existing programming (ESU classes, walking clubs, etc)
- POW-WOWS
- Health fairs
- Working through community clinics and community based organizations
- Churches (Faith-based collaboration already in place)
- Door to door written information distribution
- Presentations
- Childcare centers
- Dental and Immunization clinics
- Taking written information and posters to local businesses
- Local cable TV (Hispanic and Sudanese programs already established)

- Development of materials that are culturally sensitive to all four audiences
- Information presented to mothers at WIC clinics and other health clinics. These
 include: Charles Drew Health Center, One World Community Health Center, Fred Le
 Roy Health and Wellness Center, South Omaha Medical Associates, Douglas County
 Child Health Clinic and Dental Clinics.
- Local radio

CHWs will be assigned to the various clinics to complete 10-20 hours of work per week. While clients are waiting to be seen in the clinic, CHWs will talk to them about key messages of the project.

To complement the fieldwork of the CHWs, the DCHD will begin a media campaign that includes a press release and articles to local/community papers regarding lead issues, and a press conference to acquaint the community with the program and remind the community to get children tested. This campaign will run in conjunction with the 4-week field project during the month of July. Materials used will be developed and/or modified to assure readability and cultural sensitivity by our current CHWs. The project will be overseen by two Health Promotion staff of the DCHD.

Objective 3: A second field project will be implemented using CHWs by spring of 2005.

A process evaluation will be conducted after the training and field project to hone in on strengths and work on eliminating any barriers that arose during this time. Beginning in approximately March, up to 23 new CHW trainees will be recruited to complete the training and begin delivering health messages about lead into the community as done previously. Upon completion, there will be up to 35 CHWs who are trained in lead safety issues.

Evaluation: This component will be evaluated in the following manner:

- Evaluation of Field Project: A de-briefing of CHW will be conducted after the initial field project to survey the CHWs for strengths and weaknesses of the project; best strategies; additional strategies for the second field training; barriers and ways to expand delivery. This information will be utilized to design and implement the second field project in the spring of 2005, where additional CHWs will be recruited for the project. A similar de-briefing will be conducted after the second field project/training.
- 2. **Evaluation of Training:** De-briefing will also include strengths and weaknesses of training component, specifically to determine how user-friendly the training components were, if participants found information easy or hard to follow, and how relevant and culturally appropriate the information was overall.
- 3. **Evaluation of Numbers of Lead Tests: Numbers** of tests will be documented during a 6 week time frame to determine whether families went for testing as a result

of our educational component. A comparison will be made to determine if there was an overall increase. This will be conducted during both field-training components.

4. **Evaluation to determine Number of Families Reached:** Numbers of families reached with presentations, special events, one-on-one education, etc., will be documented as follows:

One-on-one presentations at WIC/health clinics to families waiting to see a health care provider.

Each clinic will be staffed 3 days per week at 4 hours per day. Each CHW will aim to reach 5 families per hour at each of the 7 clinic sites. While education will be directed at the parent, it affects the entire family (average 4 people).

Proposed numbers reached: 1680 families; 6720 people

Group presentations and special events will also provide an avenue for health education. CHWs will present at 5 physical activity classes (total of 100); two English as a Second Language classes (total 20); health fairs, pow-wows (total 200).

Displays/posters will also be placed at each contracting agency site. With an average of 10 visitors to an agency per day, the number reached will be approximately 200. Business foot traffic brings in hundreds of people every day. Posters in the target area businesses should reach a total of approximately 1000 within the 4 week period.

Proposed number reached: 100

Media (not measurable): Cable Access TV: The Southern Sudan Community Association will also present information on their local TV. show which is aired twice per week. There are approximately 100,000 individuals who regularly watch this station and between 5,000 – 7000 Sudanese living in the Omaha Metropolitan area. Finally, many individuals will be reached via local PSAs, newspapers, radio, and other media, such as local newspapers who cater to specific minority populations living in the target area.

During the second field project, it is expected that numbers will at least double in that we will utilize many of the same health education strategies, as well as expand to childcare centers, faith-based organizations, and home visits and will also double the number of CHWs utilized in the project.

NUMBERS REACHED: 7,040 1st field training 14,080 2nd field training

PROPOSED TOTAL FOR YEAR REACHED: 21,120

(this does not include numbers reached via media)

2. Realtor Training

The Douglas County Extension Service has begun writing a draft of lead hazard training curricula intended for realtors. The curricula is general lead information geared toward housing, soil, disclosure, and remediation. The Extension Services intends to seek Continuing Education accreditation for this curricula to make it more attractive for attendance.

3. Lead Safe Work Practices

DCHD has been providing training for homeowners, maintenance personnel, landlords, painters and renovators since 2002 on an intermittent basis. This training called "Work Wet, Work Smart to Work Lead Safe" is an 8-hour course which can qualify workers to work under the supervision of Certified Supervisors on lead hazard reduction projects. DCHD will provide this training 6 times per year starting in 2005.

Masi Max Environmental Services is under contract with the National Paint and Coatings Association to provide Lead Safe Work Practices training in each state 3 times per year for the next two years. This training teaches painters, remodelers, and renovators how to work safely with lead hazards. Two training sessions (1 in English and 1 in Spanish) have already been scheduled for January 2005.

ELIMINATION PLAN EVALUATION

The goals and objectives in this elimination plan will be evaluated as the plan progresses. If the NCELP determines the need to revise the plan as the evaluations are completed those revisions incorporated into the active plan. A yearly report of activites and Coalition successes will be compiled in September. The implementation of this plan will be effective immediately.

The NCELP will meet quarterly to collaborate and coordinate activities among the group. The Douglas County Health Department and Omaha Community Advisory Group meet bi-monthly to coordinate their efforts in eliminating lead poisoning in Nebraska.

The successful completion of meeting our goals and objectives and the total elimination of lead poisoning in Nebraska is dependent upon the continuation of current grants and funding sources. The current financial support of CDC and HUD have provided Nebraska with the ability to lower the childhood lead poisoning rate from 12% in 1997 to 1.7% in 2003. Only with the continued support will total elimination be possible.

ACKNOWLEDGEMENTS

This plan is the result of the hard work and dedication of public health workers, educators, citizens and professionals throughout Nebraska who have the passion to work on improving the public health and housing in Nebraska to protect the futures of our children.